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N. Y. H.

THE JOURNAL

MAY—JUNE, 1904



*YNOPSIS of the contents of the JOURNAL
for MAY, 1904.*

- I. "THE WAR IN THE FAR EAST"
will furnish material to which
liberal space will be given.
- II. "THE HORSE FOR MILITARY
PURPOSES, AND HOW TO
PRODUCE HIM"—by H. K.
Bush-Brown, Esq., Vice-President,
Arabian Horsebreeder's Association.
- III. "ESPRIT DE CORPS" (Silver Medal Essay)—by Capt.
J. P. Jervey, Corps of Engineers.
- IV. "COLLEGE DETAIL WORK"—by Capt. E. P. Lawton,
19th Infantry.
- V. "NOTES ON NEW INFANTRY EQUIPMENT"—by
Lieut. Lacombe, 46th Regt. (Trans. by Capt. Hanson,
19th Infantry).
- VI. "THE NEW NATIONAL GUARD"—by Col. James
Rice, Ill. N. G.
- VII. "FLIGHT AND WANDERINGS OF EMILIO AGUIN-
ALDO"—by Capt. W. B. Cochran, 24th Infantry.
- VIII. "JOURNAL OF MAJOR JOHN ANDRE, 1777-78"—
just published by the Bibliophile Society of Boston
from the original MS. recently brought to light
among the family papers of the late Earl Grey, a
descendent of Major-Gen. Grey of the British Army,
upon whose staff Major Andre served. The book
comprises a full account of the campaigns of 1777-78,
with maps and plans drawn by the author's own
hand. The Military Service Institution highly
appreciates the courtesy which permits it to publish
extracts from this rare war record.

*THE PUBLICATION COMMITTEE invites contributions
of original papers, translations and comments upon current
topics. Attention is called to "Gold Medal," "Seaman,"
"Short Paper" and "Santiago" prizes mentioned elsewhere*

The Military Service Institution.

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MEMBERSHIP AND DUES.

Membership dates from the first day of the calendar year in which the "application" is made, unless such application is made after October 1st, when the membership dates from the first day of the next calendar year.

Initiation fee and dues for first year \$2.50; the same amount annually for five years subsequently. After that two dollars per year. This includes the Journal. Life membership \$50.

NOTE.—Checks and Money Orders should be drawn to order of, and addressed to, "The Treasurer Military Service Institution," Governor's Island, New York City. Yearly dues include Journal.

Please advise promptly of changes of address.



Gold Medal—1904.

First Prize—Gold Medal, \$100 and Life Membership.

Second Prize—Silver Medal, Honorable Mention and \$50.

I.—The following Resolution of Council is published for the information of all concerned:

Resolved, That a Prize of a Gold Medal, together with \$100 and a Certificate of Life Membership, be offered annually by THE MILITARY SERVICE INSTITUTION OF THE UNITED STATES for the best essay on a military topic of current interest, the subject to be selected by the Executive Council, and a Silver Medal and \$50 to the first honorably mentioned essay. The Prizes will be awarded under the following conditions:

1. Competition to be open to all persons eligible to membership.
2. Each competitor shall send three copies of his essay in a sealed envelope to reach the Secretary *on or before January 1, 1905*. The essay must be strictly anonymous, but the author shall adopt some *nom de plume* and sign the same to the essay, followed by a figure corresponding with the number of pages of MS.; a sealed envelope bearing the *nom de plume* on the outside and enclosing full name and address, should accompany the essay. This envelope to be opened in the presence of the Council after the decision of the Board of Award has been received.

3. The prize shall be awarded upon the recommendation of a Board consisting of three suitable persons chosen by the Executive Council, who will be requested to designate the *essay deemed worthy of the prize*; and also in their order of merit those deserving of honorable mention.

In determining the essay worthy of the prize, the Board will be requested to consider its professional excellence, usefulness and valuable originality, as of the first importance, and its literary merit as of the second importance. Should members of the Board determine that no essay is worthy of the prize, they may designate one or more essays simply as of honorable mention; in either case, they will be requested to designate one essay as first honorable mention. Should the Board deem proper, it may recommend neither prize nor honorable mention. Should it be so desired, the recommendation of individual members will be considered as confidential by the Council.

4. The successful essay shall be published in the Journal of the Institution, and the essays deemed worthy of honorable mention shall be read before the Institution, or published, at the discretion of the Council, which reserves the right to publish any other essay submitted for a prize, omitting marks of competition.

5. Essays must not exceed fifteen thousand words, or thirty-five pages of the size and style of the JOURNAL (exclusive of tables), nor contain less than 10,000 words.

II.—The Subject selected for the Prize Essay of 1904, is
THE EXPERIENCES OF OUR ARMY SINCE THE OUT-
BREAK OF THE WAR WITH SPAIN: WHAT PRACTICAL
USE HAS BEEN MADE OF THEM AND HOW MAY THEY
BE FURTHER UTILIZED TO IMPROVE ITS FIGHTING
EFFICIENCY.

III.—The Board of Award for 1904, is as follows:

Major General WILLIAM A. KOBBE, U. S. Army.

Brig. General THEODORE SCHWAN, U. S. Army.

Colonel CHARLES W. LARNED, Professor, U. S. M. A.

GOVERNOR'S ISLAND, N. Y.,
Jan. 1, 1904.

T. F. RODENBOUGH,
Secretary.



The Seaman Prize.

MAJOR LOUIS L. SEAMAN, M.D., LL.B.
(late Surgeon, 1st U. S. Volunteer Engineers), has founded a prize in the MILITARY SERVICE INSTITUTION OF THE UNITED STATES by contributing annually

One hundred dollars in Gold

for the best Essay, subject to be named by himself, and to be approved by the Executive Council.

The subject proposed and adopted for 1904 is:

MILITARY HYGIENE; HOW BEST TO ENFORCE ITS STUDY
IN OUR MILITARY AND NAVAL SCHOOLS; AND PRO-
MOTE ITS INTELLIGENT PRACTICE IN OUR ARMY.

Competition is open to all Officers or ex-Officers of the Army, Marines, Volunteers or National Guard.

Three copies of the Papers on the subject must be submitted to the Secretary of the Institution, to reach his office not later than Nov. 1, 1904. Each Essay must be limited to 15,000 words, exclusive of statistics.

All other conditions will apply as provided for the Annual (Military Service Institution) Gold Medal Prize.

The Board of Award for 1904, is as follows:

Brig. General GEORGE M. STERNBERG, U. S. Army.

Colonel WILLIAM C. GORGAS, M.D., U. S. Army.

Captain EDWARD L. MUNSON, M.D., U. S. Army.

T. F. RODENBOUGH,
Secretary.

GOVERNOR'S ISLAND, N. Y.,
Jan. 1, 1904.

Prizes for Short Papers.

Extract from the Minutes of a Stated Meeting of the Executive Council of the Military Service Institution of the United States, Major General Brooke, V. P., in the Chair, held at Governor's Island, N. Y. H., March 14, 1902.

* * *

Resolved: That the regulations governing the award of Annual Prizes be and they are amended as follows:

Hancock (Infantry) Prize.

The Hancock Prize: \$50, and Certificate of Award; and \$25, and Certificate of Award: to be given for the best and second best original essays or papers, the awards to be made under existing regulations for the Gold Medal, excepting that the papers shall contain not less than 2,500 words nor more than 12,000 words, and that but one copy of each paper shall be required from the author; said essays to be critical, descriptive, or suggestive, on subjects directly affecting the Infantry or Foot Service, which have been published in the JOURNAL of the Institution during the twelve months ending March 1 of each year and which have not been contributed in whole or in part to any other association, nor have appeared in print prior to their publication by the Institution, nor have been published in the JOURNAL in any previous year, and excluding essays for which another prize has been awarded. The certificate of award to be signed by the President and Secretary of the Institution and the award to be made upon the recommendation of a committee of three members of the Institution, not members of the Executive Council, two of whom shall be Infantry officers to be appointed, annually, by the President; the award to be made and announced not later than May 1 of each year.



Fry (General) Prize.

The Fry Prize: to be the same as the Hancock Prize and awarded upon the recommendation of a board of three members, not members of the Executive Council, under the same regulations for papers or essays appearing in the JOURNAL during the twelve months ending Sept. 1 of each year, on subjects directly affecting the military service and not otherwise provided for; with the announcement not later than November 1.



Buford (Cavalry) Prize.

The Buford Prize: to be similar to the Hancock Prize, and to be awarded on the recommendation of a board of which two members shall be Cavalry officers, for papers published in the JOURNAL during the twelve months ending May 1 of each year, on subjects directly affecting the Cavalry or Mounted Service; with announcement not later than July 1.



Hunt (Artillery) Prize.

The Hunt Prize: to be similar to the Hancock Prize, and to be awarded on the recommendation of a board of which two members shall be Artillery officers, for papers published in the JOURNAL during the twelve months ending July 1 of each year, on subjects directly affecting the Artillery Service; with announcement not later than September 1.



The Santiago Prize.

THE NATIONAL SOCIETY OF THE ARMY OF SANTIAGO DE CUBA has founded a prize to be known as the "Santiago Prize," by contributing, annually, the sum of

Fifty Dollars

"for the best original article upon matters tending to increase the efficiency of the individual soldier, the squad, company, troop, or battery, published in the Journal of The Military Service Institution of the United States, during the twelve months ending December 1st in each year.

"The award to be made by the Council of the Military Service Institution upon the recommendation of a board of three suitable persons, selected by the President of the National Society of the Army of Santiago de Cuba, who shall report their recommendations on or before January 1st of the following year.

"Conditions to be the same as those prescribed for the Hancock Prize (see notice 'Short Paper Prizes'), Military Service Institution, excepting that the competition shall be limited to officers of the Regular Army or of the National Guard below the grade of major, and that papers shall not be less than 2500, nor more than 5000 words in length."

The names of the gentlemen selected for the Board of 1904 will be announced in an early number of this journal.

T. F. RODENBOUGH,

Secretary.

GOVERNOR'S ISLAND, N. Y.,

March 1, 1904.

Award of Prizes—1903.

At the stated meeting of the Executive Council, February 10, 1904, Major-General Ruger, president, in the chair, the reports of the respective boards to recommend awards of prizes were read, and, after due consideration, the determination of the Council thereon was announced as follows:

Gold Medal Prizes.

Subject: "Esprit de Corps: How It May be Strengthened and Preserved in Our Army, etc."

1st. *Gold Medal, \$100 and Life Membership* (Essay signed "Hic Jacet"), to Capt. PETER E. TRAUB, 5th Cavalry.

2d. *Silver Medal and \$50* (Essay signed "Sigma"), to Capt. JAMES POSTELL JERVEY, Corps of Engineers.

3d. *Honorable Mention* (Essay signed "Essayons"), to Major WILLIAM GERLACH, U. S. A. (retired).

Bunt Prizes.

1st. *Fifty Dollars and Certificate of Award*, to Capt. LEROY S. LYON, Artillery Corps. (Subject: "Coast Joint Maneuvers II.")

2d. *Twenty-five Dollars and Certificate of Award*, to Capt. WILLIAM E. CRAIGHILL, Corps of Engineers. (Subject: "Sea-Coast Forts in North China, etc.")

T. F. RODENBOUGH,
Secretary.

Association of Military Surgeons

Enno Sander Prize—1903=1904

The Essayist securing First Place will receive

A GOLD MEDAL

of the value of

One Hundred Dollars

The Essayist securing Second Place will receive

A LIFE MEMBERSHIP

IN THE ASSOCIATION,

of the value of

Fifty Dollars.



Subject of the Competition for 1904:

THE RELATION OF THE MEDICAL DEPARTMENT TO THE HEALTH OF ARMIES.

CONDITIONS OF THE COMPETITION.

1. Competition is open to all persons eligible to Active or Associate Membership in the Association of Military Surgeons of the United States.
2. The prize will be awarded upon the recommendation of a Board of Award selected by the Executive Committee. The Board will determine upon the essay to which the prize shall be awarded, and will also recommend such of the other papers submitted, as it may see fit for honorable mention, the author of the first of which shall receive a life membership in the Association.
3. In fixing the precedence of the essays submitted, the Board will take into consideration—primarily—originality, comprehensiveness and the practicability and utility of the opinions advanced, and—secondarily—literary character.
4. Essays will consist of not less than ten thousand, nor more than twelve thousand words, exclusive of tables.
5. Each competitor will send three typewritten copies of his essay in a sealed envelope to the Secretary of the Association, so as to reach that officer at least one month before the next ensuing annual meeting, in the present case on or before September 10, 1904.
6. The essay shall contain nothing to indicate the identity of the author. Each one, however, will be authenticated by a nom de plume, a copy of which shall, at the same time as the essay, be transmitted to the Secretary in a sealed envelope together with the author's name, rank and address.
7. The envelope containing the name of the successful competitor will be publicly opened at the next succeeding annual meeting of the Association, and the prize thereupon awarded.
8. The successful essay becomes the property of the Association of Military Surgeons of the United States, and will appear in its publications.

BOARD OF AWARD—1904.

LIEUTENANT-COLONEL JOHN SHAW BILLINGS, U. S. Army;

BREVET BRIGADIER-GENERAL GEORGE RYERSON FOWLER, New York;

SURGEON HENRY GUSTAV BEYER, U. S. Navy.

John Cropper Wise, President.

James Evelyn Piſcher, Secretary,
Carlisle, Pennsylvania.

Silver Medal Essay.

ESPRIT DE CORPS—HOW IT MAY BE STRENGTH- ENED AND PRESERVED IN OUR ARMY UNDER THE PRESENT ORGANIZATION AND METHOD OF PROMOTION.

BY CAPTAIN JAMES POSTELL JERVEY, U. S. ARMY,
CORPS OF ENGINEERS.

INTRODUCTORY.



ESPRIT DE CORPS may be defined as the common spirit, moral and intellectual, which pervades an army, causing an effacement of personal interests and individualities, and impelling its soldiers to a cheerful, willing and efficient performance of duty. The French limit the expression to the spirit developed in a regiment, and employ "esprit militaire" in the more general sense. In this article it is assumed that the general meaning of the words is involved, and where limitations are necessary, certain classes of esprit de corps are indicated or defined.

Its importance has been recognized by the great leaders of all ages, and many consider it the most desirable of all the attributes that a soldier should possess.

"It calls for special mention on account of its extreme importance. It is on the moral element that discipline, the mainstay of the army, should depend." (Balck).

"The best arms, the most skilful maneuvers, the most elaborate preparations, the most perfect system of railways, are merely means to an end. Victory on the battlefield depends on the spirit of the army and of the nation, and is attainable only by mental qualities." (Honig.)

Development and Value.—The esprit de corps of an army is increased by a sense of importance resulting from public sympathy and support, and the knowledge that the Chief Executive and the legislative bodies of the State are impressed by its value, and desire to promote its efficiency. It is also increased by sentiments of pride resulting from an

honorable or even a brilliant past history, and by a sense of power derived from able leadership, numbers, perfect organization, complete equipment, thorough education and training, and by the contentment resulting from good care and freedom from unnecessary restraints, either moral or physical.

Thus it is evident that the same causes which increase the chances of victory on the battlefield are also the prime essentials in the development of esprit de corps, which in itself is one of the principal factors of success in war.

Napoleon appreciated the value of public sympathy when he said to his soldiers in his proclamation issued in 1796: "And your fellow citizens will say of each of you in passing: 'He was of the Army of Italy.' "

His appreciation of the value of the approval and support of the Chief Executive was shown when he organized the Legion of Honor, and decorated his soldiers with his own hand.

What better examples can we have of an army infused with military spirit and trusting in its own might than the Grand Army of Napoleon in its glorious campaigns of Austerlitz and Jena, or the German Army which crossed the Rhine in 1870 to wipe out the stain on its escutcheon?

Contentment keeps the soldier in the ranks and reduces desertion. It also causes a cheerful and willing performance of arduous duties when they become necessary.

Armies have been victorious when some of these elements were lacking, but the greatest victories have been won when the greatest number of them were in conjunction.

Divisions.—The subject naturally divides itself into two heads: first, esprit de corps in the army as a whole; second, esprit de corps among the individuals of certain branches or corps. The first is the more important, but has been little developed in our army in the past, due to the fact that the different branches and staff corps seldom came into contact on account of the army being split up into many small commands at isolated posts. The second has been highly developed in certain branches and corps. The development in these cases has been due to various causes which need not be discussed at this point, as they will be explained under the appropriate heads. Briefly it has been due to the fact that the officers in any particular branch or corps are on exactly the same basis, and are not split up into factions by petty jealousies as to promotion, etc., but are educated to the needs of their

arm of the service, and thoroughly imbued with the sense of their duty towards it.

In so far as such development has produced greater efficiency in these branches and staff corps, regarding them as parts of a whole, it has been advantageous; but in so far as it has prevented them from seeing their own limitations and from recognizing the usefulness of other arms, and has caused an incorrect idea of their own functions and a segregation from the rest of the army, it has been most undesirable.

CAUSES TENDING TO DEVELOP ESPRIT DE CORPS.

Tradition.—The influence of tradition may be both beneficial and harmful. As long as it keeps in our memory the record of brave deeds well performed, the recollection of honorable customs, and spurs us to gallant acts in our turn, it is advantageous. But it must be remembered that the means to attain ends are constantly changing and improving, and when tradition would require the use of antiquated methods, the retention of an organization that has outlived its usefulness, or blocks progress, it must be ignored or discarded.

The salutary results of even a traditional name are shown in the record of Napoleon's Old Guard and of the Stonewall Brigade in Lee's army. The evil effect of tradition is shown by the condition of the French Army at the outbreak of the war with Germany in 1870. Depending on its record in the Napoleonic wars, and encouraged by its success in 1859 against a power which also clung to the theories of the past, it was overwhelmed by the Germans, who, profiting by their experience previous to 1815 and by their campaign against Austria in 1866, had made many innovations and improvements both in organization and in attack methods.

The condition of the French Army and French national sentiment is well expressed in a prophetic letter from Stoffel, the French military attaché at Berlin, written in 1868 to the French Minister of War at Paris. He shows the wonderful progress of the Prussian nation and army since 1815, and states that he is impelled to do it by the knowledge that the French Army and nation at large are in complete ignorance of everything that concerns Prussia. He then asks: "How could it be otherwise, since the French youth receive no instruction in the history of modern nations, their character or institutions, no

serious instruction in any modern language, and are not even taught a taste for study?"

Prussia had been completely successful in 1866 against Austria. France had been equally successful against the same power in 1859. Prussia profited from her experience, and made ready for the war of 1870. So far as France was concerned, Stoffel asks: "What instruction of military value have we obtained from this war? Have we sought to perfect a single one of our institutions, a single branch of our service?"

We in the United States have resembled the French. The lessons of our wars have been learned but to be forgotten, and we will probably be only thoroughly awakened by our Jena as were the Prussians in 1806.

Organization and Equipment.—No better illustration of the good effect of proper organization and equipment can be found than in the case of our own coast artillery. For years it struggled on with an antiquated and useless system of ordnance and defenses, and the spirit of officers and men naturally flagged. Gradually proper equipment and new fortifications were supplied, but poor organization prevented concentration of effort or proper control. The present organization has brought about a complete change, and the coast artillery now stands for progress and efficiency.

It is not within the province of this article to discuss our general organization or to suggest changes. It exists, and must be accepted as it is, good or bad. There is an ideal organization, and another which is practicable of attainment. Ours must be regarded as the latter. It is not what our military authorities would have adopted had they been given a free hand, but is what Congress was willing to give us. It is necessary, therefore, to discover the good and evil likely to result from it, and take steps to amplify the former and to minimize the latter.

The effect of the detail system to the various staff corps, if carried out literally, will be to destroy all staff esprit de corps, both good and bad, and will of course be beneficial so far as the latter is concerned. The total destruction of the spirit may be prevented by re-detailing able officers to the higher grades after a temporary service in the line. The staff corps will be kept in touch with the army as a whole by the detail of different men to the lower grades, and will thus avoid the development of narrowness and prejudices which seem to have been the bane of the old system.

The detail system has in itself certain other possible evils. If the most suitable men are always detailed to the various positions, the general result will be good. If the appointments are made through influence, the staff will be filled by men whose sole claim to consideration will be the amount of backing that they can command in Washington, and who will add to lack of character and devotion lack of experience and possibly lack of intelligence. It is possible also that the system may introduce politics into the army, as the Chief Executive will naturally consider the political views of the candidates for the higher offices, whereas the only points that should be considered in determining relative merit are fitness and distinguished service.

The present incumbents, with few exceptions, meet with the approval of the army and of the country at large. The question naturally arises, will future Presidents pursue the same policy? The answer must be in the negative, unless the system of detailing as a reward of merit is so firmly established in the beginning that the people, the press, and the army will demand its continuance. Custom, as Lord Bacon says, is as powerful as the laws of nature, and if the principle of the selection of the fittest be once firmly implanted in the army and the public mind, no President or Secretary will risk public disapproval by overthrowing it.

When properly applied, details to desirable staff positions, as a reward for services rendered, will be most potent in developing intelligence, character and devotion among our officers. When improperly applied, they will be destructive of all esprit de corps, ambition and pride, and a positive discouragement to efficiency.

Our system of promotion to the grade of general officer is unfortunate, but there is at present no other method of *permanently* rewarding unusual merit. But to punish the many, who deserve no punishment, for the sake of rewarding one man is an injustice which can not be productive of good. The gallant and satisfactory performance of duty is largely a question of opportunity. Those who fail when they have been given this opportunity are the men who deserve punishment, and not those who, without influential friends, have patiently awaited for the opportunity which never came, performing to the best of their ability their daily duties, and needing only a chance to show what they were worth.

Soreness and jealousy in regard to more or less rapid promotion in the different branches of the service are fruitful sources of discontent, and are prejudicial to the development of esprit de corps. The rate of promotion depends partly on retirements for age or other causes, on deaths, on appointments to the grade of general officer, and on details to the various staff corps. The last two should be fairly proportioned among the different branches. There is no valid reason why men of the same grade in different branches should not rank in that grade according to the date of original commission. This would prevent the present injustice of an officer in any grade being ranked by an officer of the same grade in a different branch of the army who is many years his junior in point of service, and would involve no change in organization or method of promotion.

There is in the army a growing tendency to bestow unusual rewards for the performance of plain duty. The mere fact that an officer has discharged the duties of his grade or position efficiently is not sufficient reason for advancing him over his less fortunate comrades, most of whom would have acquitted themselves with equal credit had they been given the opportunity. Such a course will soon engender the feeling that the reward is more important than the duty, and duty will not be performed properly without the hope of reward. It is only when a man has done more than his duty, when his services have been pre-eminent, that he is entitled to a special reward. Whatever the reward given an officer of the army, it should not injure his comrades' status unless they deserve punishment through their inefficiency or neglect of duties. The only system of rewarding worthy officers without injustice to others that we can adopt without changing our organization or system of promotion is either by pecuniary compensation, by details to desirable positions, or by commissioning in the "Distinguished Service Corps" advocated by the present Secretary of War. This scheme provides for a corps in which an officer may, for specially meritorious service, receive an additional commission, with an increase in rank and pay of two grades, while still retaining his original rank in his proper corps or branch.

If an officer has been so conspicuously worthy that a special mark of appreciation is considered necessary, he should be given the pay and allowances of the next higher grade, or a

commission in the "Distinguished Service Corps." This would of course involve legislation by Congress, but would require no radical change in our organization or system of promotion. Such a scheme would suitably recognize the merit of worthy officers, and would involve no injustice to anyone.

The most valuable *temporary* reward at present at the disposal of the President which may be bestowed without injuring others is a detail to the General Staff. If details to this corps continue to be made for merit and record alone, it will be a powerful incentive to industry, intelligence and esprit de corps.

The War College should be the stepping-stone to the General Staff. To stimulate emulation in each branch and department, and to give the proper ratio or representation to each, a certain number of appointments to the War College should be assigned to each. In addition, a certain number of appointments should be open to the army at large, the selection being made by the competitive examination of men chosen for their intelligence, character and general efficiency as shown by their records. By this means, proper emulation will be developed not only among the officers of each branch, but also between officers of different branches.

Better results would be obtained in all cases if the details carried extra pay and allowances, for they invariably involve extra expense. This applies particularly to military attachés. Their positions can be filled at present only by men who have wealth. It is unjust that officers without private means should be shut off from so desirable and valuable an experience, and an allowance should be made to them, as is done in many European armies, for entertaining and living in the style which is expected of them, and which is commensurate with the wealth and dignity of the country.

Details as indicated, fairly made on merit alone, and the extra rank, pay and allowances proposed for cases of extraordinary merit, will be sufficient incentive and reward for the development and preservation of efficiency and esprit de corps among our officers.

Our late wars have tended, in many minds, to exalt the infantry and cavalry at the expense of the field artillery. But the circumstances should be considered; generalizing from *minor wars* is dangerous. It is only in a great conflict or by diligent study that the true value of all arms may be learned.

Home states that moral power is much increased by the feeling of security which men have when they are conscious of being well armed, and know how to use their weapons. Consequently every effort must be made to keep all equipment in the most modern and efficient condition, and to train the men thoroughly in the use of their respective arms.

Training.—Training may be considered under two aspects: Mechanical training which will give efficiency in drills, the handling of arms, field practice, etc. Moral and mental training which develops the ideas of duty, honor and esprit de corps. The two combined produce practical esprit de corps, and success in war.

The art of tactics, excepting a few very general principles, is constantly changing, and obsolete and useless forms are to be avoided. Men will take an interest in exercises when they see the utility, the practical value of them; an unending succession of dreary parade-ground maneuvers will not prepare a command for war, but will breed discontent and flagging spirits. All training therefore must as nearly as possible resemble the conditions of war, and must be varied in character so as to maintain interest. Sufficient form, ceremony and dress must, however, be retained to make the soldier take a pride in himself and in his profession, and to attract and interest the recruit and the public.

Moral training for all must be of such a nature as to produce an innate idea of duty, patriotism and honor.

Mental training for officers must be not only professional, but also educational in its widest sense. It will be discussed more fully under the heading "Officers." For enlisted men, it must of course be for the most part of a practical nature, and is of the highest importance.

It is related that when the German soldiers saw the dense ignorance of the Austrians captured in the war of 1866, they felt that they themselves were superior beings, a species of demi-gods.

The Proper Exercise of Command.—"If a man does not know how to command, he is but a poor imitation of an officer—a wearer of tinsel and gold lace. . . . The power of command in an officer must be the spirit of duty which animates him. . . . It is the organized will of the army, but will not develop esprit de corps, if it requires automatism, refuses

voluntary co-operation, represses initiative, is suspicious of energy, and humiliates pride. . . . " (Gavet).

The same general rules are applicable in an army as in the family. Nothing should be forbidden where disobedience, owing to circumstances, will be certain, and nothing should be ordered the accomplishment of which is impossible. The mere fact, however, that an organization is obedient does not signify that it is well commanded, for the instruments to compel obedience are so well defined and described that even an incompetent may make use of them. An officer may only be called a good commander when, without disturbance, trouble or unnecessary punishment, he attains the best possible results from the materials which he has in hand, or which he may obtain by energy and industry.

An officer's authority and commission are not personal, but pertain to his office. "Shoulder straps resemble family relics; when a man possesses either, he must be careful to avoid vain illusions." If a man attempts to deceive his subordinates by posing and ostentation, he will stultify himself, for it is a well-established principle that an officer may sometimes deceive his superiors as to his ability, but never his inferiors. Fearing nothing and asking no favors, he should therefore be simple, sincere, dignified, devoted and just, laying aside his own personality and selfish ambition and bending all of his energies to perform his part of the common duty.

The true end of all military training is preparation for war, and this fact must always be kept in mind. The inefficient commander will fail to see this, and will look to immediate results only, considering perfect knowledge of the drill regulations, a perfectly executed manual of arms, a literal and exact interpretation of the army regulations, a perfect system of paper work—in short, mechanical precision—the sole object to be attained; but such a course will not fit a command for war, and certain portions of it are positively harmful. The real object is to develop not only mechanical precision, but also a spirit of duty, which will make all individuals ready to sacrifice everything personal, even their lives, in the discharge of their functions.

Commands in themselves are not forces, but directions. These directions are distributed through various subordinates to the individual soldiers. Consequently, from the commander down, each grade has its proper functions, and an

organization is properly commanded only when each individual knows the duties of his grade, is supported by his superiors in the discharge of those duties, and performs his function with all his energy and ability.

A commander must then have good subordinates. Possibly it would be easier to manage weak and pliable ones, but their work and opinions will be of little value. They should be regarded as principal assistants, and not constantly reminded that they are inferiors, or be treated as boys. In addition, arrogance, affectation, brutality to inferior officers and men, correction or reproof of officers or non-commissioned officers before inferiors in rank, lack of courtesy, too much attention to detail, usurpation of the functions of subalterns, evasion of responsibility, and suppression of initiative are grave faults in the superior, and must be constantly guarded against.

It is not necessary to the efficiency of a command that it should be kept in a state of terror through fear of severe punishment. To employ fear as a means of inculcating bravery and esprit de corps is a strange contradiction. One could as well imagine the existence of affection and confidence in a family governed on the same principle. Obedience must be as spontaneous as the performance of any other well-defined duty, and the commander must bear in mind that it is not a servitude, but to obey and to command are mutually related *duties* of equal rank and importance.

Punishments, as such, have no educational value, but are simply repressive, and serve as warnings to weak or vicious men. General remission or mitigation of punishment, for causes having no military bearing, should be avoided. As a rule, a sentence should be mitigated or remitted only when it is illegal or excessive, or on the recommendation of the officer who inflicted the punishment or preferred the charges.

Offenses may be divided into three classes: 1. Errors committed in good faith. 2. Faults resulting from weakness or carelessness. 3. Deliberate and premeditated acts of omission or commission. The first simply require a kindly correction; the second, corrections or punishments more or less severe, depending on circumstances; the third, harsh and prompt repression, and severe punishment in every case being graded according to the degree of the offense, the previous record of the offender, and the necessity of disciplinary measures and example.

Cruelty and unnecessary harshness are grave faults; but coddling of officers and soldiers, attempts to secure popularity by indulgence, flattery or by undignified familiarity with inferiors, are equally objectionable.

Personnel.—This subject will be considered under two heads: (a) Officers; (b) Enlisted Men.

(a) Officers.—Ruchel has stated that the soul of an army is its corps of officers. *Esprit de corps*, as a moral quality, may be regarded as the most important of the elements composing this military soul. Consequently, before any great development of military spirit can take place, the material, or the corps of officers, must be of satisfactory quality.

Our officers come from three sources—the Military Academy, the Ranks, and Civil Life. These sources should be so controlled that each will yield the best possible returns, and preliminary education so directed, if practicable, that future officers will come into the army with at least elementary ideas of military spirit. But little preliminary work can be accomplished, so far as civil appointments are concerned. The development of national spirit by our general educational institutions is greatly to be desired for this class of officers. It can be developed in the other two sources, and thus it happens that graduates of the Military Academy and successful candidates from the ranks may enter the service with an initial advantage over the civilian appointee so far as military spirit is concerned.

West Point gives probably the best example of *esprit de corps*, in a limited sense, that could be selected. Its development there depends partly on tradition, on the high standard required, on popular esteem and on the knowledge that all have equal chances in the race for honors. Unfortunately in the past most of these inspiring elements have been lacking in the army.

The object of the West Point course is to educate and to form character as well as to train men for the military profession. This is often lost sight of by advocates of practical training only who are prone to unfavorably compare the practical knowledge of the recent graduate with that of a new appointment from the ranks. A fairer method would be to make the comparison two years after the commissions had been received. If the object of the school is to train in practical work solely, that object may be more satisfactorily

attained by abolishing the Academy, and having all officers come from the ranks. But character forming, the instillation of ideas of truth, honor, duty and patriotism, and general education are part of the curriculum of West Point, and the measure of her success is learned by referring to history. Her Grants and Lees, her Shermans and Jacksons all bear testimony to the success of the methods employed.

Changes, of course, must be made from time to time in the curriculum, both theoretical and practical, to meet modern educational and military requirements; but traditional methods and customs which are to be fostered and respected must be distinguished from abuses which are to be restrained and corrected. The soundness of the general principles established by Thayer become more indisputable each year, and it is certain that, if these principles are adhered to and cultivated, the Academy will continue to turn out men of character similar to those who have already made her famous.

The standard should not be lowered in order to give a greater number of graduates. It will cause a corresponding deterioration in character, intelligence and military spirit.

There are certainly young men in every Congressional district or among the acquaintances of the Senators who can attain the standard desired if they are given the opportunity. It is a fact that many men are found deficient who would have made good officers; but it is also a fact that, on the average, men who can and do attain proficiency make better officers than those who can not or do not. If a cadet who should be found deficient is retained, he is generally unjustly filling a place belonging to some other more worthy man in his district, who, if given a chance, would make a better officer than the man who is barely proficient; for, in general, failure to attain proficiency is due to indolence, indifference and lack of character rather than to lack of intellect.

If the number of graduates is not sufficient, the supply of officers should be supplemented by carefully selected appointments from the ranks or from civil life as hereinafter proposed, for it is a fallacy to suppose that any kind of a graduate is better than the able appointee from the other sources.

The standard of requirements for appointments from the ranks should be raised, and opportunities provided so that candidates should have ample opportunity to comply with the requirements.

Direct civil appointments, as at present employed, should be abolished, and replaced by the appointment annually of graduates with the degree of A.B. from the universities and colleges, or of the honor graduates from certain selected military schools.

The essential attributes of an officer are intelligence, character and devotion. Intelligence gives discernment and understanding; character gives strength which may be applied rightly or wrongly; while devotion makes use of intelligence and character to accomplish proper ends.

Intelligence in time of peace will be paramount. In time of war it may be largely displaced by will power; for, as Scharnhorst said at the council held at Erfurt in 1806, "It matters not so much what is done as that what is done is done with proper spirit and unity." Intelligence and will power combined make the military genius. When in addition to these devotion is also present, we have the perfect soldier and man. Intelligence is a natural gift, but it may be cultivated by diligent study; and the less-gifted but diligent plodder will accomplish more than the naturally bright but idle genius. If intelligence is only employed in picking out faults and in the unjust criticism of the acts of others, or if it causes undue caution and delay, it is misapplied and will not achieve success.

An officer must have the strength of character necessary to apply his intelligence, otherwise he will be regarded as weak and vacillating. Strength of character should not be used to attain selfish personal advantages, for such a course will entirely destroy esprit de corps in a command. Hence an officer must have as a third attribute entire devotion to the common cause of duty.

Most men possess or may readily acquire sufficient intelligence to perform the duties of officers. Strength of character is more rare, and devotion in its highest sense is unfortunately often lacking. All of these moral and mental qualities may be instilled and augmented by education, which is consequently one of the most powerful of all the elements in creating and preserving esprit de corps among our officers.

There is a tendency at present among certain officers to sneer at education and intelligence, and the claim is often made that most of the great soldiers have been unlettered. This claim has no grounds of justification. Of the successful soldiers of the past, we may select as types Alexander, Cæsar,

Frederick the Great and Napoleon. Alexander received a most careful education, and was devoted to all the science and art of the day. Cæsar was highly educated, and he and his successors did all in their power for the advancement of learning. Frederick the Great was so devoted to learning that he became after his association with Voltaire a pedant. In a letter written in 1846 to his brother, the Crown Prince of Prussia, he regretted every day that he had not devoted to study and application. Napoleon was a bookworm, and he is said to have devoted sixteen hours per day to study when not on active service. Once, on a visit to a school, he said to the students on leaving: "Young men, each hour of lost time is a chance of misfortune for the future." Taking more modern instances, Sherman, Lee, Von Moltke, Lord Roberts, Kitchener, we find the same thing. They were or are all educated and studious men.

Considering on the other hand uneducated or not highly educated leaders, we find that the self-made marshals under Napoleon usually failed when he was not present to guide their steps.

Now if education was considered necessary in the past, when fighting was more of a mechanical art than the science of the present, it is far more necessary in modern war, when so much depends on individuals. It is therefore only through education and application, and by association with able men, which is but a phase of education, that intelligence, character, efficiency, ideas of honor, moral worth, patriotism and devotion to duty which are essential to esprit de corps can be developed and preserved.

Schools can but sow the seeds or lay the general foundations of education. When a man graduates from a college or university, he is only on the threshold of knowledge. Subsequent progress rests with the individual alone. If he does not advance, he will certainly go backward, and his initial education will have been of little use.

Without education, a man must be guided largely by instinct, and instinctive impulses are generally narrow and selfish. Consequently education is necessary to the officer in order that he may know not only his own functions, but also those of other branches, and the proper application of each within its respective sphere and as parts of the whole. Liberal views will never be developed by living in a rut. They come

only by study, by experience and by contact with broad-minded men.

Education may be considered under two heads, viz: (1) General; (2) Technical. The former is the more important in developing intelligence, character and devotion, the essential attributes of an officer. The latter is also necessary that it may guide these attributes in order that they may be exercised in the proper directions. Technical studies alone will produce narrowness, prejudices, lack of initiative, and lack of judgment and ability in the performance of broad general duties involving principles not given in the technical training.

Our officers are required to perform duties involving a wide range of knowledge. They are unexpectedly called upon to act as governors, civil judges, municipal and state authorities, as business men, and in short, to a greater or less extent, have performed nearly all functions requiring intelligence and broad general education. Consequently their general education should involve the study of the three classes of books proposed by Frederick the Great, who states that, of the various books published, there are three kinds that are particularly useful to a man in public life: "Historical works accompanied by good criticisms and reflections; works on negotiations and treaties; lastly, judicious and instructive criticisms."

In addition, military history in its general sense, in its relation to the rise, progress and decay of nations, should receive careful attention. Every officer should also know the general principles of mathematics, natural philosophy, chemistry, constitutional and international law, and be acquainted with the standard literature of his own and foreign countries. The knowledge of foreign languages—at least a reading knowledge—especially of Spanish, German and French is indispensable. Without it the valuable military and general literature of these nations will not be available for the training of the mind and the widening of the mental horizon. Our officers should be given opportunities to learn languages, and to educate themselves generally by travel abroad, and special consideration given to those who are skilled linguists.

Technical or professional study should not be confined to the reading of works connected with one's own branch of the service. It is not, however, necessary to read every new treatise on the art of war or tactics that comes from the publishers. Every officer who aspires to the grade of general,

or to a detail with the General Staff, should study and know the functions of all arms. Otherwise he will be unable to command, or to make plans for the operations of a composite force, through narrowness, corps prejudice or ignorance.

Military principles are comparatively simple and few. A small number of standard books, carefully read and digested, will give better results than a large number carelessly read and imperfectly grasped. Practically all strategical and a few tactical principles are immutable. After the principles have been grasped, the study of campaigns and battles, or technical military history, should be taken up and continued during active service. In order to keep in touch with foreign methods and abreast of the times, every officer should subscribe to and read diligently—making notes and criticisms—our own and foreign service journals. To these should be added a few standard periodicals and reviews to keep his general education in touch with modern progress.

A thorough knowledge of topographical work, drill and army regulations, military law, elementary engineering, and the administrative work of his organization are also essential parts of the officer's technical education.

A soldier's profession is an honorable one, and officers should have a proper pride in their calling. Pride is admissible only when there is just grounds for it. Then it gives loftiness of spirit, disdain of all that is low and dishonorable, and is an inspiration to higher ideals. It is impossible for an inefficient officer to have proper pride. In his case it becomes ridiculous, and is justly condemned by civilians. But if an officer performs his duty efficiently and conscientiously, if his motives are patent to all as part of that duty, then he may be justly proud of his position, and the public will share in that pride. Pride does not require external evidences or manifestations. Such manifestations are attributed to conceit, arrogance and insolence, and bring the officer and the entire army into disrepute and dislike with the average citizen. It should simply be the innate knowledge in the officer that he is a public servant of value when he properly performs his duty, giving him a quiet dignity, confidence, strength of character, and devotion to duty which will be found in successful men in every walk of life.

The possession or lack of private means among officers is a difficult question to discuss. In civil life all men are equal

before the law. Social status, in this country at least, is largely dependent on wealth, and men fall naturally into classes having the same incomes as themselves. In the army all officers are equal before the law, and also socially, regardless of their means. The natural tendency is of course for those with large outside incomes to set a certain pace or standard of living, and those with smaller incomes try to keep up with them, resulting in heart burnings and debts. The increase of wealth in the army of late years has been marked, and unless moderation is observed by those having money, and common sense, wisdom and self control by those without it, two evils will result, viz: 1. The army will be divided into cliques according to incomes. 2. Many weak men will be tempted to live beyond their means, with resulting pecuniary troubles. To avoid these evils, the well-to-do men must be moderate in their expenditures, at least so far as their military life is concerned, and must make absolutely no pecuniary distinction among their brother officers. Those officers whose only income is their pay must remember that they are socially, intellectually and morally on the same plane with their more fortunate comrades. They must run their establishments within their means, entertaining in so far as they are able, without distinction as to wealth or lack of it, and trying by superior ability to compensate for lack of money.

The deliberate marriage of an impecunious officer with a wealthy woman for her wealth alone is despicable, and involves the sacrifice of all self-respect, and makes him a slave. On the other hand, an officer is not to be condemned from the mere fact that he has married a rich woman, he being himself without means. That is a question which concerns him alone, and which his heart, his conscience, and self-respect alone can settle.

Ambition must be cultivated and encouraged. Without it an army will make no progress, and its officers will get into a rut from which they will be lifted by death alone. False ambition is the desire for personal aggrandizement, the selfish longing for advancement and material comforts, regardless of the rights and deserts of others, or of the benefit and welfare of the army and nation. True ambition, as Von der Goltz says, is "The desire innate in every man to prolong his existence beyond the pale of death, to snatch an immortal part of his existence from annihilation." An officer's name will be

immortal in every sense only when his strength and life have been devoted to the establishment of some great principle or to the advancement of humanity, and when he has united with the other attributes of a soldier those mental and moral qualities involved in the title "great."

No other calling, besides that of an officer, involves such direct responsibility for the lives, happiness, health and morals of men. The officer must therefore have a clear insight into human nature, and a knowledge of cause and effect. He must be always willing and ready to accept grave responsibilities with dignity and without presumptuous bearing. No man can successfully inculcate virtue and worth in others unless he possesses these attributes himself. Consequently, all mental and moral development which is desired in a command must be present in a far higher degree in the corps of officers.

Our officers are required to perform arduous duties until they are almost within sight of their allotted age of three-score and ten. They must therefore preserve their health, youthful vigor, dash and esprit de corps to the end. One of the great causes of premature old age and ill health is anxiety in regard to the future of one's family or one's self. Since it is impossible for an officer, on his small income, to make provision either for his own old age or for his family after his death, it is a good investment for the State to provide in moderation for that old age and family if she desires to get the most effective results from her officers during the period of their active service.

The other two essentials for the retention of health and youth are proper physical and mental exercise. Physical exercise will keep the body young, sound and active. If an officer does not exercise his mind also, if he does not study, and keep up with modern progress, his ideas are of course soon those of the past, and his mind will become antiquated and narrow, although his body may be sound. The character of mental exercise desirable has already been indicated. Physical exercise depends on the man, one kind being suitable for one case and unsuitable in another. Every officer should, however, constantly practice riding, as it will certainly be required of him at some time in his career.

Junior officers should avoid disparagement of superiors even in private, or appeals to higher authority over the heads

of their immediate commanders. On the other hand, superiors, especially inspecting officers, should not treat officers whose commands or accounts are inspected, as suspects whose guilt or neglect they are trying to establish. Mutual trust and respect, truth and frankness in all grades are essential, and without them there can be no common spirit of duty or devotion.

Officers must remember that they have nothing to do with the justice or injustice of a contest. That is decided by the civil authorities, and the functions of the army commence only after war has been determined upon. The contest once started, it is the duty of every officer to use all his intelligence and will power and disposable means to attain the maximum possible measure of success. Similarly, with political questions the army can have no connection. It is the servant of the nation and not of any particular political party. Its officers must have but one rule of action—the common duty to the nation.

Comradeship is most necessary in the corps of officers; but feelings of personal friendship must never lead to acts of favoritism. An officer must condemn a fault in a friend as harshly as he would in an enemy. In their relations with their superiors, equals and inferiors, three modes of conduct are open to officers: 1. They may be brusque and blunt in their conduct and speech. They will not thereby sacrifice their own self-respect nor the respect or confidence of other men; but they will be feared and disliked, and there will be no development of esprit de corps by such a course of action. 2. They may be tactful, firm and courteous in their relations with all men. This course involves no sacrifice of self-respect nor of the respect of others; it will produce confidence, admiration, affection and harmony, and will be a most powerful factor in the development of esprit de corps. 3. They may be servile to their superiors, and seek to curry favor among their equals and inferiors by flattery and indulgences. Such a course is destructive of self-respect and of the respect of all decent men. No esprit de corps can possibly exist in an army where the officers are imbued with such a spirit. The mere fact, however, that an officer is loyal to his commanding officer should not lead to his condemnation for servility. A junior may tactfully point out the undesirable results of a certain course of action on the part of his commanding officer, or make

suggestions if he is in a position to do so; but when a definite decision has been made by the superior, it is the duty of every subordinate officer and enlisted man to use their utmost efforts to execute the ideas of the commander without grumbling or criticism. In other words, there must be a complete effacement of personal feeling in the execution of the common duty.

(b) Enlisted Men.—If the officers have the proper *esprit de corps*, there will be no question as to its development among the enlisted men. The average of American manhood of the type which enlists in the army will of necessity be practically the same for each company or troop throughout the country. Many company commanders have obtained most excellent results, with the material given them, in the development of efficiency, moral worth and *esprit de corps*. Major Bullard shows in his article on "The Moral Training of the Soldier" that satisfactory results may be attained, even with the poorest materials, by proper handling. Consequently, where a company commander, with the average quality of recruit, fails to achieve success, there can be no division of responsibility, the captain and he alone is responsible for the failure. There cannot be in the service such an anomaly as good officers and poor troops, or poor officers and good troops. The value of the troops will depend almost entirely on the worth of the officers.

In so far as it is possible, recruits should be young men, as youth is more susceptible to emotions and to moral, mental and physical training than age. This condition is especially necessary in war, for "it is only the young that depart from life without pangs. They are not as yet fettered to this earth by the thousand threads that civil life winds about us. They have not as yet learned to be parsimonious with the use of life. The enigma that they are curious to solve lies as yet untouched before them. They mount the hill, and do not see how short the precipice is on the other side. Their yearning after experience arouses their ardor for war. Rest and enjoyment, and the aims and aspirations of riper years are as yet far removed. They advance into battle with joy and lightheartedness, and both are necessary for the bloody work." (Von der Goltz.)

The treatment of enlisted men, and the results obtained, must be regarded as a reflection of the character of the captain. We may assume that he uses the methods which would be

most effective if employed toward himself by others. If he treats his men as brutes, the result will be a company of brutes commanded by a brutal master. Similarly any improper method of handling must give unsatisfactory results, and any proper method, good results. The average soldier is human and is susceptible in a high degree to appeals to his manhood, his honor, his patriotism, and his sense of duty. As shown in Major Bullard's article, the captain should have a plain, manly talk with each recruit. He must remember that soldiers are not servants or slaves, but men in whom must be developed the highest military spirit and sense of duty. Patriotism, self-respect, character, intelligence, pride and devotion are necessary in the enlisted man as well as in the officer. Their intelligence and patriotism must be developed by lectures and instruction in the company schools; their self-respect, by treating them as men until they have forfeited the right to such consideration; their character and devotion, by instruction and personal influence on the part of the captain; their pride, by maintaining the company in a high state of efficiency and by making them all see that the profession of arms is the most honorable one that can be followed in spite of certain disagreeable duties which every soldier must perform. Influence over the soldiers must be gained by the superior intellect, character and devotion of the captain and his lieutenants. The officers must constantly devote themselves to the welfare of the men, their comfort, health and happiness without, however, coddling them, or sparing them, when sacrifices are necessary. It is only the unnecessary and useless hardships and regulations that cause discontent and murmuring.

It is a common impression that our enlisted man is underpaid, the money part only of his compensation being considered. Comparing his pay and allowances with that of the same social grade in civil life, the advantage seems to be all with the soldier, for not many laborers can comfortably clothe, lodge and feed themselves, and then have \$13.00 to \$20.00 clear money each month. The pay of the non-commissioned officers should, however, be increased. They are the connecting link between the officer and enlisted private, and should possess many of the same attributes as officers, particularly strength of character and devotion. After ten to fifteen years' service, they should be given an opportunity

to enter the civil employment of the United States. There are numerous places under the control of the Civil Service Commission which could be admirably filled by efficient non-commissioned officers. At least those under the direction of the Engineer Corps of the army should be open to them. The number of vacancies should be announced each year, and the most worthy of the non-commissioned officers, with the required number of years of service, as selected by the colonel of each regiment, should be sent to some central point, where a competitive examination based partly on the mental qualifications, but principally on the records of the candidates, should be held, and the most suitable men, equal in number to the vacancies, should be selected by the board. Any other men who, in the opinion of the board, are qualified, should be so reported to the War Department, and a certain proportion assigned to vacancies occurring during the year. The adoption of this scheme, together with the promotion each year of a certain number of non-commissioned officers to the grade of officer, are certainly sufficient incentives to develop efficiency and military spirit among the enlisted personnel.

Athletics and Recreation.—The primary object of athletics is to produce a healthy, strong physical condition in a command, and to preserve youthful activity and vigor even in old men. Other benefits are the production of contentment and happiness resulting from healthy bodies and minds, recreation and the development of a proper spirit of pride, emulation, and manly honor if the sports are properly conducted. Contact with men of different organizations and with civilians will also do much to broaden the views of both officers and enlisted men, and will lay the foundations of friendships which may be useful in after years. In order that these benefits may be reaped to the fullest advantage, the conduct of all games and sports must be above any suspicion of any unfairness, dirty play, or trickery. The annual squabbles over eligibility, the attempts each year to enter men at colleges for the sole reason that they are able athletes, the charges and counter-charges as to unfair tactics, and the pugilistic encounters so often witnessed on the football field, can have no place in the army if athletics is to aid in developing esprit de corps.

Officers must have a clear idea as to the proper function of athletics. An athlete, pure and simple, has no special

qualification for success in life other than that given by a strong body and a healthy physical state generally. The true course is to neglect neither the mind nor the body completely. Neglect of either will result in impaired efficiency.

A. Lawrence Lowell shows in the *Atlantic Monthly* for October, 1903, that considering the entire number of graduates at Harvard for a period of twenty-seven years, one man in thirteen has achieved distinction; considering the men who have graduated in the first seventh of their classes, the ratio is one in seven; taking the first honor men, it is one in four; for the boat crews, it is one in thirteen; for the baseball team, the ratio for the entire period is one in fourteen; but taking the last eighteen years of the period, it is only one in seventy-two. Taking the period from 1872 to 1898, one hundred and eleven men have played on the various nines. Of this number, no man has won the Bowdoin prize, only one has taken honors in any subject, and through 1887, when class rank was given up, only one man has stood in the first seventh of his class. For the football men the ratio is one in thirty-one, and their record for scholarship is but little better than that of the baseball men.

The standard employed as a measure of distinction is favorable to scholarship; but, as Mr. Lowell justly remarks, unless athletics is carried to an excess, men taking part in it should not fall below the average of the class in intelligence.

At West Point, where athletics has been regulated and kept within the bounds of reason, the record both as regards scholarship and success in after life as an officer has been much better. No definite data can be given as to ratios, etc., and the duration of West Point's athletic life has been only thirteen years; but it may be stated that in this short time at least one of the football captains has graduated at the head of his class, and the captain of the team for the ensuing year is also probably one in his class, and many of the players have been above the average in intelligence and studiousness. Many of the graduates who have played football, etc., as cadets, have also distinguished themselves in active service, and have certainly won a fair share of success as officers.

These examples show clearly the distinction between wisely regulated and immoderate indulgence in athletics with the resulting neglect of studies. Consequently the successful athlete must not think that he can be a successful officer

without diligent mental effort. The failure to realize this fact is well illustrated in the English Army, where polo and cricket playing has been carried to such an excess that many officers totally neglect the intellectual side of their training; but "the notion which prevails that a soldier man, especially the leader of soldier men, the officer man, may be of all men of his rank the least learned of men, is a new notion and a foolish notion. . . . It is the officer man's duty to take care of humble neighbors in time of stress and adversity, and in times of danger. . . . There is no other man who has such responsibility as the officer man—none; there is no other man whose mistakes are so final, so irrevocable, so far-reaching, so terrible; and surely, of all men this is the man who wants education at its altitude. . . . "

"Now you will tell me that the soldiers of England played games in the past. Did they? I can put an end to that argument forevermore. Not one of the great soldiers of our past played games after eighteen or nineteen years of age. Here is a long list of them . . . Havelock . . . Clive . . . Roberts . . . Kitchener . . . We are told that Waterloo was won on the playing fields of Eton . . . but I say that Wellington never said anything of the kind . . . and if he did say so he would be telling a falsehood." (Maguire.) Neither Lord Wellington, nor any of the twenty leading English generals of his day played games, but all joined the army at ages varying from twelve to eighteen, and that Wellington could ever have made the famous remark attributed to him in regard to the playing fields of Eton seems absurdly improbable.

One objection to football, baseball and polo as a means of physical training is that only a very limited number of men, especially in the army, take part in them. A regimental team, for instance, will be composed of the same or nearly the same men for year after year. Therefore other more generally employed athletic exercises, requiring less technical skill and team work, in which men as individuals may take part, should be encouraged, and a certain amount of gymnastic work should be compulsory for all men throughout their active service.

The interest and excitement afforded by games and athletic contests will be recreation for all; but there will be many leisure hours at the disposal of the unmarried enlisted

man, and he should have a gathering place or club as well as the officer. The club feature of the Post Exchange has been practically destroyed by the legislation prohibiting the sale of beer, etc. Advocates of this legislation will maintain that provision has been made by Congress for furnishing and equipping places of amusement with the beer and wine feature eliminated. Enlisted men are not above the average citizen in their desires and needs. Unless it be of a religious character, the failure of a civil club, without facilities for supplying not only beer but all alcoholic beverages, would be certain. It cannot, therefore, be reasonably expected that soldiers will take much interest in an institution which is forced upon them against their wills, and in opposition to practically the unanimous recommendation of their officers, and in which their moderate needs and desires cannot be gratified.

It is almost useless to repeat arguments in favor of the re-establishment of the Post Exchange on the old basis, as they have all been stated and thoroughly discussed in various official documents. The Post Exchange was established in 1889, and the sale of beer, etc., was prohibited in 1901. Following its establishment, hospital admissions for alcoholism, annual trials by courts martial, average fines, and desertions showed a marked decrease, while the savings steadily increased. Sufficient time has not yet elapsed to determine definitely the effect of the prohibitory legislation of 1901, but the indications are that already it has been detrimental to the morals and discipline of the army. One unfortunate result is definitely known. The Act of 1901 put an end to the regulated sale of beer and light wine in ninety-eight Post Exchanges. Since that time, there have been established in the United States and in the Philippines in the vicinity of military posts over seven hundred new saloons where the sale of liquor is entirely unregulated both as regards quality and quantity, and many of which have disorderly houses attached.

In view of the data given above, it is idle to deny the beneficial effects of the regulated sale of beer and light wines by the Post Exchange on the morals and happiness of the enlisted man, and its consequent value in developing and preserving esprit de corps.

The Attitude of the People.—In order that the army may have esprit de corps developed to its fullest extent, the people

must have national spirit. Our army has for so long a time dwelt apart from the people that it seems difficult to instill in the latter any sympathy for the hardships, appreciation of the good work, or charity for the shortcomings of the former. There is an unjust and unwarranted tendency among civilians to regard the enlisted man as an outcast. This attitude lowers the quality of the recruit obtained, and exercises a depressing effect on the morals, the intelligence, and the military spirit of the army. If a man knows that his family and friends regard his calling as disgraceful, it will be difficult for him to take a pride in it himself. The hostility of the American public to the army in the past is attributable partly to our national traditions and training, and partly to the attitude and position of the army. The dangers of militarism have been sounded in the public ear since the Revolution, and are inculcated at every stage of the education. These causes will be difficult to remove. The only remedy lies in the more general diffusion of knowledge through education and the press, and the demonstration to the people of the necessity of an army, and of the fact that the army is not a menace to liberty, but the safeguard of it as long as the Chief Executive and the legislative bodies are true to their trust.

The attitude of the army, as a whole, has been one of reserve and dignity. Individual officers have possibly conducted themselves with arrogance and presumption when in contact with civilians, but the conduct of the great majority of officers has been above reproach. Unfortunately the action of the minority is far reaching. A citizen naturally judges by his own experience, and he will condemn the entire army from a single disagreeable contact with an officer or enlisted man.

Lastly, the position of the army is that of a small, isolated, and, in the eyes of the citizen, favored class. This position is accentuated by its attitude of reserve, and, in unfortunate instances, by the arrogant conduct and bearing of officers and enlisted men. The result is of course the hatred of class which will be developed in any free country. The remedy for this state of affairs must be closer relations with the public, especially through contact with the National Guard, the development of a broader character in our officers, and, without servility or sacrifice of self-respect, a careful avoidance of arrogance or assumption of superiority.

The Attitude of the Chief Executive, the Legislative Bodies and the War Department.—The responsibility for the moral, mental and material efficiency of the army is a divided one. In the beginning the military authorities can only recommend appropriate legislation. If Congress fails to enact these recommendations into laws, it and it alone is responsible for whatever decrease or non-increase of efficiency results from such failure. When Congress has provided proper means, its responsibility, so far as material efficiency is concerned, ceases. The President, the War Department, the corps of officers are responsible for the proper execution. The executive departments have a grave charge, and they can do more to develop or destroy esprit de corps than all else combined. They bear the same relation to the corps of officers as that corps bears to the rest of the army. If preferment is given an officer through favoritism or political reasons instead of for moral worth and efficiency, it is human nature for others to try to accomplish the same ends by the same means, for the career of virtue and efficiency is a laborious one, while the way through influence and politics is comparatively easy, and the law of least work is as applicable here as in a physical sense. A system of appointment and promotion through favor or influence is the most fatal of all moral diseases which may afflict an army. "Command may fall to this low level, when ignorant officers, adventurers, men without moral value are appointed to the higher grades on account of a bad system, or minor wars. Military spirit also succumbs to errors of advancement when promotion is given to the intriguer, the sycophant. If, for example, the officers attached to the personal staffs of those high in command or to the various staff bureaus are assured by this mere fact of being advanced to the highest grades, all these advantageous positions will be filled by selfish intriguers, false and ambitious, who end by appropriating to themselves the chief commands. Incapable of understanding and appreciating sentiments which they have never felt, morally emasculated by a career which has rendered them servile, they spread over the army the most detestable influences. If our chiefs are politicians, the spirit of national duty and military spirit will disappear." (Cavet.)

Neither of the great political parties should make a point of abusing or specially favoring the military establishment. Such a course will naturally develop in the army a sentiment

favorable to the friendly party—a condition of affairs which might be taken advantage of by an unscrupulous person. Politics have no place in the army. The latter is national in its character, and every officer who allies himself to any party, society or religious sect, whose regulations require, in any respect, a surrender or sacrifice of that national character, or demand allegiance to principles which are at variance with our system of government, violates his oath of office, and should not remain in the service.

Our regulations should be broad and general in character, and a compliance with the spirit rather than with the letter required. A too rigid insistence on adherence to the letter of regulations suppresses initiative and intelligence, gives an excuse for avoiding or shifting responsibility, destroys esprit de corps, obstructs development of character, and converts officers into administrative automatons.

Liberal appropriations are necessary for the maintenance of an army, for providing it with modern equipment, and opportunities for field and target practice, and for athletic sports. Arms and ammunition soon grow obsolete in the rapid improvement of ordnance of the present day; the appropriations for equipment must therefore be continuous and not intermittent, for it is only when the soldier is persuaded that his arms and equipment are better, or at least as good as those of any possible enemy, that their possession is of material aid in developing esprit de corps.

A rigid maintenance of the standard of excellence of the officer in the performance of his routine duties as well as in promotion examinations is to be insisted on. The farcical examinations held during and immediately subsequent to the Spanish-American war were pardonable then on account of the urgent need of officers and the lack of opportunity for preparation. Both examiners and examined must be careful, however, not to unconsciously adopt such forms as standards for future use under conditions of peace. An officer's work and efforts for improvement should end only with death or retirement. -

Many men need no spur to work except a consciousness of duty. For these, examinations and a high standard of efficiency will be no hardship, for they will be always prepared. For the slothful and careless, the periodical examinations and the high standard required of all will be invaluable as an incentive to duty.

Promotion by seniority will cause the advancement of unworthy men unless carefully controlled. This control lies with the promotion boards, whose recommendations should be based both on records and on examinations, and should be final.

If all officers had equal opportunities and equal chances for honors, as have the cadets at West Point, if their relative rank depended only on their relative ability, worth and energy, as is also the case with the cadets, then a system of promotion by partial selection would be possible. Such a condition of affairs is manifestly impossible in practice, however desirable it may be in theory, and the advancement of unworthy men must be prevented, and the high standard of excellence maintained by rigid promotion examinations and requirements as to record.

CONCLUSION.

The army is a composite machine so far as organization is concerned. It differs from the machine in that its smooth and harmonious working depends on the mental and moral attributes and individual ability of many different men. If these men are morally and mentally unworthy, if they are divided into factions through local jealousies and prejudices, if the military body is tainted with favoritism, corruption and politics, if tradition and sentiment are utterly ignored, if the organization and equipment are allowed to become obsolete, esprit de corps will be non-existent, and there will be a bitter day of reckoning when war breaks out.

On the other hand, if the officers are intelligent, of strong character, and filled with devotion to the service and to military virtues, if merit is properly recognized, and is the sole grounds for unusual advancement, if the organization and equipment are maintained in the best and most modern condition, if national spirit is aroused and public sympathy is secured, if the useful traditions of the service are observed and honored, esprit de corps will develop to the highest extent, and the army will accomplish all that may be expected of it in peace or war.

It must always be remembered that the infantry is the backbone of the army, the branch which generally furnishes the casualty list, while the cavalry and the field artillery are its principal assistants. The other branches, within their

spheres, are of the highest importance, but are subsidiary, and their value will depend not on their own estimate of their importance, but on the assistance which they render in the performance of the common duty.

Every officer must know his general functions as an officer of the army, and also the special functions of his particular branch. All branches have their peculiar duties, and nothing is gained by the custom of belittling the work of other branches than their own, so prevalent among certain officers. It simply shows that such officers have limited intelligence, or have neglected to acquire the knowledge of the duties of other branches which is essential for the proper understanding and practice of the military profession.

It is a glorious thing to be an officer of an honored staff corps or of some particular branch of the service, but still more glorious to be an officer of the army, and it would be well if our officers signed themselves, "Captain or Lieutenant, etc., U. S. Army, Such and Such a Corps," rather than is the custom at present. Consequently, while esprit de corps in the different branches and staff corps is valuable, and should be cultivated under the limitations already given, it is army esprit de corps which is desirable above all things. When that is secured, and the more material necessities fully provided, we need have no fear for the future.

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"FEZ" IN HARNESS—March 2, 1904.*

THE HORSE FOR MILITARY PURPOSES AND HOW TO PRODUCE HIM.†

By HENRY K. BUSH-BROWN, VICE-PRESIDENT,
ARABIAN HORSE-BREEDING ASSOCIATION.



EVERYBODY knows that the horse has always been a very important element in war, and modern improvements in the methods of warfare, rather than diminishing this need, have increased it. The Boer War proved this beyond all controversy.

All horses are not suited for military use, for all are not adaptable to the requirements of military duty; indeed, the requirements themselves change from age to age and from generation to generation.

The heavy horse to carry armor has long since been dispensed with; and even the large horse for the cavalry "charge," so effective in our Civil War, is less important now than the light, active and enduring horse for mounted service. The greater the intelligence of the horse, the greater his efficiency.

*"Fez," Golden Sorrel, 15½ hands. Sire—"Abdul Hamid II." Son of imported "Leopard," presented to General Grant by Sultan of Turkey. Dam—"Princess of Morocco," Barb, Thoroughbred and Morgan. Bred in Canada. Winner of 1st Prize and Sweepstakes, World's Fair, 1893.

†Mr. Bush-Brown is a sculptor by profession, and author of the equestrian statues at Gettysburg of Generals Meade and Reynolds and of the Indian Buffalo Hunt at the World's Fair, Chicago, 1893.—[Ed.]

As an illustration of this, I call to mind the experience of a friend of mine in the Civil War. He had a horse of superior intelligence who could learn anything. When the day's march was over, he never needed to look after his horse other than the feeding. The horse was turned loose to roam as he liked, and when he was needed it was only necessary to whistle for him, and he reported at once for duty.

One day by a maneuver of the enemy this horse was captured, and my friend, from a distance saw his favorite led into the enemy's lines. The beauty of the animal attracted the attention of a Confederate officer who knew a good horse when he saw him, so he left his own steed and mounted the new capture. My friend saw his opportunity and he whistled loud and clear for his horse. He saw him throw up his head in attention. The call was repeated and was answered at full speed, bringing the Confederate officer into the Union lines a prisoner. No power on the back of that horse could control him when his master called. The challenge "Halt!" from the sentinel brought the only reply possible, "I can't."

Another friend who was in the mounted-rifle service had a horse which did picket duty while his master slept comfortably rolled up in his blanket. No danger of being caught napping, for at the slightest noise the faithful beast would come and wake his master by poking him with his nose. My friend wept when that horse was killed under him by the fragment of a shell.

These are, of course, unusual instances, but they go to prove the value of intelligence.

There is just as much difference in the intelligence of horses and the various breeds of horses as there is between men and the various races of men.

The efficiency of the army horse just as much depends on his intelligence as the efficiency of an army depends on the intelligence of the men who compose it.

So the requirements of a modern army are that the type of horse should be intelligent, active, enduring and able to carry weight. Size is not important, and there are those who like Sir Walter Gilbey*, in his book on "The Small Horse in Warfare," prove that the large horse is not the most efficient.

*Among other authorities, Sir Walter Gilbey quotes Captain Upton of the British Cavalry. His book was written as a result of his experience in the Egyptian War, and he strongly urged his government to breed from the Arab horse to supply the Army remounts.

Had they then followed his advice, they would not have needed to turn to Austria and the United States for the horses to serve in the Boer War.

They expended over \$75,000,000 in the United States alone for mules and horses to ship to South Africa, taking anything in the shape of a horse they could get.—[H. K. B.-B.]

Sir Walter also shows that the qualities mentioned above are to be found in the highest degree in the Arab horse, and strongly advocates using that breed as foundation stock. Such has been the experience of the whole world, both ancient and modern, so that argument here is unnecessary on this detail. It may, however, be well to call to mind that the Arab horse is the foundation from which are bred the army horses of Russia, Austria, Germany, France and Italy.

The greatest generals of the world, among whom are Frederick the Great, Napoleon, Wellington, Washington, Lord Roberts and Kitchener, have ridden Arab horses.

In the German Army maneuvers, last year, a regiment mounted on Arab-bred horses was put on a forced march of twenty-five miles, the last five of which were on a run. Not a horse gave out and everyone took part in the action of the day the same as the freshly mounted men.

These facts show what we must attain and how to do it.

The only thing remaining is to devise a plan by which the United States can obtain the best horses possible, and enough of them for the use of the army, and at not too great cost.

In the orders of the Quartermaster's Department are rules governing the purchase of horses for the cavalry service which are a fair description of what the army horse should be, but over and above that there is a harmony of proportion, a beauty of outline and a grace of movement in the best type of horse which words cannot well express.

As authorities are pretty well agreed as to the type of horse needed, there is no cause to dwell on this part of the subject.

Admitting, then, that the experience of the world demonstrates that we must have an infusion of Arab blood, and as mares of this strain are not obtainable, we must depend on stallions for our purposes, of which we have already a goodly number in the country.

Now let us go over carefully what we have of native stock from which we can obtain the necessary brood mares. Leaving out all classes of draught horses as manifestly not suited to our purpose, we may divide the remaining horses of our country into three general classes.

1st, the Bronco; 2d, the Thoroughbred; 3d, the Trotting horse:

1st. *The Bronco*.—The Spanish Barb horses, left to run



"GOUNIEAD,"
Pure Arab. 15 hands, bred in stables of Czar of Russia; with two of his produce from American bred mares.

wild four centuries ago on the plains of this continent, have been intermixed with cast-off scum of equine stock brought into the west by frontiersmen. The result of neglect, privation and cruelty is the modern Bronco.

Although they retain some of the good qualities of their Barb ancestors, they have for generations known man only as an enemy, until it has become an instinct to hate and fight mankind. A horse suitable for army use must have a friendly sympathy with his rider. The Bronco is proverbially unreliable in an emergency, and army life is made up of emergencies. Therefore his temper, alone, renders the Bronco unsuitable for our purposes but more than that, his inferior size is sufficient to make him undesirable, to say the least.

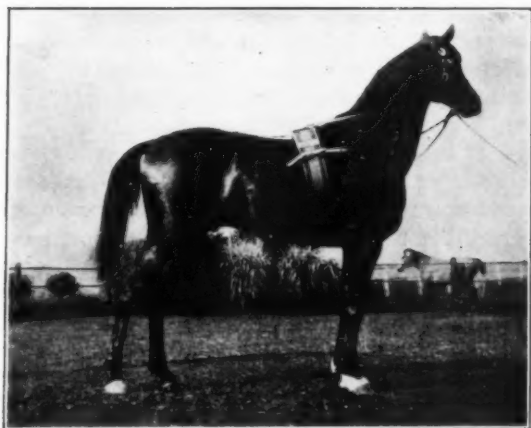
2d. *The Thoroughbred*—raised for generations for the sole purpose of running a fast mile (more or less)—has become ill-tempered, irritable, nervous and unreliable, and wholly lacking in the endurance required for campaign life.

There is a class of thoroughbreds, however, to be found in Kentucky, Virginia and Canada, that has been bred for generations for gentlemen's saddle horses. They are not strictly thoroughbred, but they are a well-defined, large type of horse very reliable and full of courage. They are so like the Irish Hunter as to be exported to England as such. On mares of this class must we largely depend to produce the army horse.

3d. *The American Trotter*.—Strictly speaking, this type of horse can be of no use in breeding horses for the army, for he is the direct antipodes of what a cavalry horse should be.

In order to show what to look for among trotters that may be of use, let us imagine the perfect saddle type at one end of the line and the long-backed, big-headed, slab-sided, cat-hammed, soft-boned trotter at the extreme other end of the line. Fill in the intermediate space with a dozen of the varying degrees of these two types, and somewhere about the medial line is a type of horse quite fixed of his kind.

Show me the horse and I can read his pedigree by families. Show me the pedigree and I will model his likeness. On a thoroughbred foundation have been bred two or three crosses of trotting stock carrying always the inbred breeding of Henry Clay, Long Island, Black Hawk or Morgan. Mares of this type, of good size, bred to the Arab horse would produce a very serviceable army horse, and the trotting inheritance would



"NAAMAN."

Pure Arab. Chestnut. 15½ hands. Sire—"Anazch." Dam—"Nagli." Bred in U. S.



"MARINER."

Bay. 15½ hands. Sire—Imported Arab, "Gouniead." Dam—Imported Irish hunter.
Bred in U. S.

prove no detriment to his utility. These two classes of mares well selected, with Arab horses would produce a type of army horse which would have no superior in the world.

A method of putting such a plan into practise is made by Brig.-Gen. Henry T. Allen in his notes on "Cavalry Mounts," published in the January-February number of the *JOURNAL OF THE MILITARY SERVICE INSTITUTION*. It seems practical, as some responsible breeders have approved of it.

General Allen's plan is that "contracts should be given to breeders of horses conforming to required specifications, from sires and dams approved by quartermasters or other officers detailed for the work. The breeders to be responsible for everything connected with the purchase, care and maintenance of the farms—to permit the officers to select within reasonable limits the sires and dams, and in general to supervise the breeding and selection of 'strain' of horses."

The only suggestion I could make to this plan would be to have the administration of such a contract put under a commission composed of army officers and experienced horse breeders who know the type characteristics of horses, and how to attain what the army needs.:

Such a commission might well be made up as follows:

- 1st. A cavalry officer.
- 2d. An artillery officer.
- 3d. A prominent breeder of Arab horses.
- 4th. A prominent breeder of saddle horses.
- 5th. A prominent breeder of trotting horses.

Each of the three civilians on the commission would bring to it the experience of breeding one of the three types that must be used to produce the army horse of the future; and his advice would be of greatest use in the selection of animals in the type with which he is familiar, for, as I have shown above, not all thoroughbreds or all trotters or all Arabs are suitable to be used in the breeding of the army horse.

Such a commission would be strictly non-partisan, and could carry out General Allen's suggestion in the best possible manner, and produce for the United States Army the best military horse in the world.

It takes only two years to build the best battleship that the ingenuity of man can devise, but it takes five or six years to grow a horse that is mature enough to endure campaign life. Who knows how much we may need horses for the

Army in 1910, or how much the destinies of the Anglo-Saxon race may depend on the quality and quantity of the horses that are to be raised in this country in the near future, for on this country England seems likely hereafter to depend for her army horses.

Therefore, some plan like this of General Allen's should be inaugurated without more delay.

In this, as in other things, is eternal vigilance the price of peace.



"Damon" and "Pythias" (3 months). Sire—"Gouniead." Dam—Trotting bred mares.

TRAINING OF CADETS FOR THE U. S. ARMY

By EDWARD S. HOLDEN, LIBRARIAN, U. S. M. A.



ON June 21, 1860, a commission was appointed to examine into the organization, system of discipline and course of instruction of the U. S. M. A. at West Point. Its report, consisting of 350 pages, is printed in Senate Miscellaneous Documents No. 3, 36th Congress, 2d session. The Commission consisted of:

Hon. Jefferson Davis, United States Senate,
Hon. Solomon Foot, United States Senate,
Hon. Henry Winter Davis, House of Representatives,
Major Robert Anderson, United States Army,
Capt. A. A. Humphreys, United States Army.

The Commission heard testimony from a great number of distinguished officers and graduates, among them General Totten (Inspector U. S. M. A. 1838-1864, and member of the Board of Visitors in 1819, 1821, 1822, 1826 and 1828), Colonel Delafield (Superintendent U. S. M. A. 1838-1845 and 1856-1861), Colonel R. E. Lee (Superintendent 1852-1855); and from members of the Academic Board. The replies of men of the calibre of Generals Cullum, Ord, Meade, Schofield, Wright, Horace Porter and others here printed should command our respectful attention. Whenever possible, their statements are given in their own words. I have endeavored to select such paragraphs as shall give an entirely fair view of both sides of the questions involved.

The report was ordered to be printed December 13, 1860. In the troublous times of 1861-65 it was forgotten, and it has been seldom referred to since that day. It is worth while to go over it page by page and to set down such of its conclusions as appear to have a value at the present day. The progress of events and the lapse of time have settled some of the questions then discussed, and these may now be passed over in silence.

The Committee met on July 17, 1860, and regularly thereafter till September 5th at West Point, and on November 28th at Washington. Their report is accompanied by a historical sketch of the U. S. M. A. which has been often

reprinted in whole or in part.* This sketch is especially inadequate as regards the early years of the Academy. Its most serious error is (p. 25) in attributing the authorship of the plan for an Academy, submitted to Congress in January, 1800, to the Secretary of War, McHenry. It was really prepared by Alexander Hamilton.†

A series of questions was submitted by the Commission to the Superintendent U. S. M. A.; another series to the Commandant of Cadets; another to the professors and instructors; another to the senior tactical officers; and a letter asking opinions as to needed changes, to a long list of officers and ex-officers of the Army. The questions covered the entire organization of the Academy; the mode of appointing cadets and professors; of conducting examinations; of assigning graduates to corps in the Army; of maintaining discipline; of giving instruction, etc., etc. The answers subsequently quoted sufficiently indicate the scope of the inquiry.

Brigadier-General Totten (Inspector U. S. M. A. 1838-1864) writes that the great characteristic of the Academy has been that its education is real, and as far as it goes, thorough. It has been successful and has given only good officers to the Army. All graduates have been greatly the better for their instruction in mathematics, whether or not they have made immediate use of it. They gained intellectual strength from exact science. He favors a five year course.

Colonel Delafield is of opinion that there are great advantages in having permanent professors at the head of some of the departments, so long as they are competent. It enables them to keep pace with the advance in science which demands incessant study. To fill their chairs by detail from the Army would be very hazardous. The excellent results already attained could not have been obtained without permanent professors. The departments under detailed heads do not approximate in efficiency to those under permanent professors. He gives reasons (p. 254) why it would be a mistake to make *all* the instructors at West Point permanent. The constant interchange between the Army and the teaching corps is a great advantage to both. The duties of the Commandant of Cadets now include the teaching of Army organization and administration, equitation, veterinary science, outpost duty, strategy and grand

*Mr. Boynton's History of West Point, among other places.

†Hamilton's Works, vol 5, pp. 378, 383, 387.

tactics, as well as the tactics of artillery, cavalry and infantry. The first class in June and the fourth class in January should be examined by the whole Academic Board, all other examinations to be conducted by a head of department and his assistants. All re-examinations should be by the whole Board. The present system of assigning graduates to corps can not be improved. The U. S. M. A. is superior to all European schools in that graduates are prepared for each and every arm of service. West Point gives a good basis upon which to build. The rest depends upon the graduated officer.

The present system of discipline is wise and well considered. By continued enforcement habits are formed here that become the basis of character. Since 1814 the code of regulations has been revised only four times. The Academy is no longer a school of engineering, but an institution for the purpose of national defense. It is, however, a great advantage to have all cadets pursue the same studies here. All graduated cadets are competent to serve, in emergencies, on any arm of the service. The term of the Academy should be four years, and no cadet should be permitted to remain longer than five. A permanent commission should be created to supervise the Academic courses, regulations, and text-books (p. 149), the commission to meet every two years. Officers are not allowed to report cadets on suspicion. It is time thrown away to attempt to teach mechanics to all members of the class by the analytic method. The professors should teach their first sections, and supervise the instruction of the rest. The cadets are overworked.

Professor Mahan stated that the scope of the mathematical courses and those in natural philosophy are sufficient for the needs of the department of engineering. The study of grand tactics and strategy has recently been transferred to the department of tactics. If the Commandant has not been a reading man, nor prepared by previous study, the course will suffer by the transfer. An officer who would, otherwise, make the best Commandant might be deficient as an instructor in the art of war.

He concludes that the courses in strategy should be taught by a permanent professor. Proficiency in mathematics indicates that a cadet will be proficient in engineering. A system of conducting examinations by persons not connected with the Academic Board would be defective. He has sometimes

thought that a final examination upon the general principles of the whole course would be a fairer way of determining graduating standing than the present method. Colonel Thayer was not of this opinion. The course of study should be fixed by law and not liable to change except by the concurrence of the Academic Board, the Secretary of War and a permanent commission, some of whom should be civilians (p. 138). The defect of our course as a whole is, perhaps, that we are too abstract, and that there is not sufficient application of the theory and principles taught. He quotes (p. 139) a report of Poisson's on the teaching of mechanics at the École Polytechnique, and considers it applicable to the instruction at West Point. Superintendents should be chosen from the scientific corps, and all professors from officers of the Army. Professorship might be filled by detail from the army. Instructors appointed should be notified several months in advance. Four years is the right term for such details. A large number of graduates are now, so to say, re-educated by their details as instructors. Everything at the Academy should be governed by army rules; quarters should be so selected. Professors should supervise the work of a whole class and have no special section, just as a colonel commands a regiment and not a special company.

Demerits should count on class standing. Demerits are not given as a punishment but for a record of conduct. If a competent person can be found he might be professor of both French and Spanish. The sections in languages have been, in the past, as well taught by Army officers as by foreigners. He thinks that for several years cadets have been overtaken, and that too much has been attempted at the Academy; especially is this tension felt in the first two years.

Professor Bartlett criticizes the programme of studies, which he thinks too crowded. We have too much examining and too little teaching. The tendency of the present system is to break down a scientific academy and to erect upon its ruins a school of practice. There is too little of repose, too much of parade and show. He considers the geometrical method of teaching physics better adapted to the lower sections. If, however, different methods are employed for different parts of the class, transfers from section to section become impossible, and injustice to some cadets would result.

He would have the first year of the Academy a year of

trial, with a severe examination in June. All who are not then thoroughly proficient should be dismissed, and not given even the benefit of a doubt. The Government is entitled to the best talent and industry of the country. There is nothing in the course of mathematics or of natural philosophy that can be properly omitted in the education of an engineer. To allow cadets to draw books freely from the library, without reference to the subjects of the books, might prove an interference with their studies.

Professor Church reports that the studies in the mathematical department ought not to be increased or curtailed. The mental training acquired is needed by every officer of the Army. The reputation of the Academy depends on the thoroughness of its mathematical teaching in a great degree. Two subjects per day are all that should be studied. The programme of studies is imperfect. We have fallen into the error of attempting to combine too much of a thorough literary with a thorough scientific and military course. It is to the scientific and military course that the graduates owe the systematic and thoughtful habits that have made them distinguished as officers or citizens. There are fewer cadets found deficient than formerly because the lower sections are more thoroughly instructed, not because the standard has been lowered. He sometimes is of the opinion that too much care is bestowed on the lower sections; we are helping and pushing along young men who are not disposed to do much for themselves.

Professor Kendrick is of opinion that professors should retain their Army commissions and not be detailed at West Point for ten or fifteen years, returning to the Army in time.

Professor Agnel has found that French has been better taught by Army officers than by natives of France—civilians. The effort of the department is to give a knowledge of the grammar of the language, so that, subsequently, the pupil can himself acquire the power of speaking it.

Professor French remarks that grammar, logic and rhetoric must be taught. An officer must write well and rhetoric must be studied, therefore. Logic is the basis of reasoning, and hence of rhetoric. Geography is a necessary preliminary to history. Law must be taught. Ethics is a preliminary study to law. Conduct becoming an officer and a gentleman is defined by ethics.

Lieut.-Col. W. J. Hardee, Commandant of Cadets, submits a written report giving his opinion that no officers should be ordered to the tactical department until they had served five years with their regiments, and no instructors before three years. High scientific attainments are not necessary for the Superintendent U. S. M. A. The method of assigning graduates to corps is objectionable and degrading. Class-standing does not, he thinks, indicate fitness. No assignments to corps should be made until after three years service in the line, and the staff corps should be entered after a competitive examination. The regulations U. S. M. A. are admirable, but they must be rigidly enforced both at West Point and at Washington. Lectures on strategy should be delivered by cadets, not by the instructors. Cadets should have only two lessons per day. Four years is the proper term, not five. All professors should be officers of the Army detailed until they attain a major's rank; then they should return to the Army. All professors should teach a section, not merely supervise, except, perhaps the heads of the departments of mathematics and of ethics.

General Winfield Scott suggests the organization of a preparatory school to which cadets may be admitted at the age of fourteen. From this school they would pass into the U. S. M. A.

The Adjutant-General U. S. A., Colonel Cooper, is of opinion that the U. S. M. A. should be remodeled upon the plan of a staff corps, making all its members permanent, or by adding to the Army a number of supernumerary officers sufficient to do the duties at West Point without depleting regiments. The latter plan is the better. All graduates should be sent to serve in the line, and vacancies in the staff corps should be filled by competition. Every officer should serve, in succession, with all arms of the service.

Col. R. E. Lee, Superintendent 1852-55, remarks that if the course of study is one of four years, instruction at the Military Academy must be limited to military subjects, together with the arts and sciences that pertain to them. The higher parts of the art of war must be studied at schools of application. If schools are not established, then the course must be five or six years.

Brig-Gen. Joseph E. Johnston believes that the Academic Board should be composed of Army officers, and that the dis-

cipline is unnecessarily severe. The difference between the life of a cadet and that of an officer is too great. The mode of "punishment" by demerit is effective. Habits of judicious reading are not inculcated. The time given to mathematical studies is too great. Some of it should be given to military history.

Col. Harvey Brown believes that all graduates assigned to the line of the army should spend one year at a school of application of their arms, before joining their regiments. The term at West Point should be four years.

Col. Benjamin Huger would leave the administration of the Academy entirely in the hands of the Superintendent and the Academic Board, so that the War Department would intervene only in extreme cases.

Lieut-Col. W. H. Emory states that the tendency of the Academy has been at times to lose sight of the purposes of its foundation and to impair its military character and to assimilate it to our universities, where all power is in the hands of an Academic Board; this tendency should be resisted, for if the Academy ceases to be essentially military it should cease to exist. Every graduate should serve two years with troops and then be examined for a commission in a special arm.

Maj. Alfred Mordecai is of the opinion that it would be well for the Superintendent to have a knowledge of all the sciences taught at the Academy. There has, of late, been a disposition to attach too much importance to practical instruction. The Academy should not be a school of practice. The ability to receive practical instruction is the principal thing to be acquired here. He does not think a separate academic corps of professors necessary. They should be detailed for indefinite terms from captains in the army. Different portions of the classes should have different training; all need not be brought to same standard. Everything that is learned should be learned thoroughly. As a rule mathematical ability is not an indication of fitness for a military career. It would not be well to combine the schools of application with our Academic course. The duties taught in such schools should be learned mainly after graduation. Cadets assigned to scientific corps should serve for some time with the troops. Generally speaking, it is advantageous for officers of engineers, ordnance and artillery to serve with cavalry and infantry, but not so necessary for officers of cavalry and infantry to serve

with other arms. Artillery lieutenants should be detailed, in turn, for ordnance duty. Four years of incessant study and confinement at West Point are enough.

Maj. J. F. Lee is of the opinion that metaphysics, ethics, theology, logic and rhetoric should be omitted from the studies except as far as to show what they are. All cadets should be instructed in the sciences necessary to the artillerist and engineer. A liberal education at the colleges of the country is sufficient to prepare officers for the infantry and cavalry. In the past the Commandants have not been, on the whole, as capable men as the Superintendents. It is not a chief object of the Academy to exhibit a well-trained battalion; it is a school of the military sciences.

Capt. H. G. Wright would not increase the time given to practical instruction. The graduated cadet is not supposed to be a thorough practical officer, but to be fitted by his education to become one. The Army is his school of application.

Capt. W. B. Franklin would have the term five years. All study hours should be before a dinner at 3 P. M.

Capt. A. E. Shiras says: Taking it for granted that we are to have but one military school to educate officers, the principle that each candidate should receive a scientific education appears sound, and the West Point system well chosen. Athletic exercises should be encouraged. Some information respecting army accounts should be given. Less rigid application of "reports" and "demerits" would do no harm.

Capt. G. W. Cullum is of the opinion that professors should be detailed from captains in the army returning to it on their promotion to major. He would have a captain detailed as professor of English literature. A new department of the science of war should be created. In any future war with a great power the infantry and cavalry will be mainly supplied by volunteers, while regular officers will be called to perform staff duties and those of artillerists and engineers.

Of late years there has been a tendency to make the Academy more of a drill school and less a seminary of learning. It should be kept in view that if it is attempted to combine an elementary school, a scientific academy, and a school of application, the institution will be crushed by its own weight.

Capt. E. O. C. Ord replies that graduates should serve two or three years with troops before being assigned to a corps.

The course at U. S. M. A. should extend over five years, one year solely of practise.

Lieut. John M. Schofield states, among other things, that mechanics should be taught by the analytic method and gives his reasons (p. 126), but remarks that the geometric method in optics, etc., is better suited to the lower part of the classes.

Lieutenant Holabird, Adjutant U. S. M. A., states that the system of written explanations led to prevarications on the part of cadets; and that the system of immediate rewards for getting no demerit has had an admirable effect.

Lieut. Horace Porter states that the discipline of the cadets depends principally on the character of the Commandant and of the tactical officers. The signing of certificates by the cadet officer-of-the-day, and other cadets, is decidedly pernicious, as the certificates are not regarded strictly. The appeal should be made to the cadet's sense of military duty and the question of honor should not be involved in a matter of slight importance.

Lieutenant Mendell is of the opinion that the Academic standard is not too high for competent persons, but thinks the whole of the course (in natural and experimental philosophy) should not be taught to the lower sections. The present way of assigning graduated cadets to corps is a good one. You may not invariably get the best talent, but you are always sure of faithfulness.

Mr. G. W. Smith (U. S. M. A. 1842) submitted a memorandum. The course should be four years. Five is too long to keep a cadet subject to the restraint and confinement of cadet life; and it is too short to complete a professional education. The institution is for the purpose of training the mind, laying a groundwork of general principles, not for turning out professional experts. Professors should be detailed from the Army for ten years, other instructors for four. Demerit should not count on graduating standing.

Cadet Adelbert Ames of the first class is of opinion that the system of rewarding cadets who get no demerit by short leaves of absence has had a good effect. No evil has resulted from obliging the cadet officer-of-the-day to sign a certificate that he has performed his duty.

The foregoing extracts present nearly all sides of the questions considered by the Commission, whose conclusions and recommendations, after hearing all the evidence, are given

on pages 2-19 of the volume cited. As there is no space to reprint them here, a brief summary is given, as follows: The high standard of scientific proficiency and the physical efficiency of the graduates attest the wisdom of the system of the Academy. The Commission, in accordance with the maxim: "Let well enough alone," abstains from proposing radical changes, and makes its recommendations with the object of bringing the law and the practice into conformity. It has prepared a bill for the reorganization of the Academy (pp. 12-19) essentially as follows:

An instructor of practical geodesy, topography and reconnaissance, and one of gymnastics, etc., to be added, and a committee of supervision to be organized. The superintendent to be an officer of the army, a graduate, distinguished for his scientific attainments; the commandant to be a graduate, distinguished by service in the field with troops. Both to be appointed by the President with the advice and consent of the Senate. The commandant to rank next after the superintendent. The professors to be appointed in the same way, and to hold office subject to removal by the President on the recommendation of the U. S. M. A. commission. They may retire or be retired after 25 years of service. The chief of engineers to be the inspector of the academy. Cadets assigned to the engineers shall serve at least a year with cavalry or infantry before joining their corps.

The U. S. M. A. commission shall consist of one Senator, one representative, the inspector of the academy, two other army officers and two civilians, one eminent in mathematical the other in physical science; the four members last named to be appointed by the President. They are to revise the programme of studies, the methods of instruction, the text-books, etc. The commission is to attend the June examinations and thoroughly inspect the academy and report to the President. Any official deficient in his duties or capacities is to be reported. The President of the United States may make regulations for the academy and the superintendent may prescribe regulations consistent therewith and with the orders of the Secretary of War. The academic board shall consist of the superintendent, the commandant, and the professors. Its duties are to examine cadets, to grant diplomas, to report on the special qualifications of graduates, etc. After each examination the board shall report to the Secretary of War all cadets deficient in conduct or studies, and every cadet found deficient shall be discharged unless the Board recommend him (on account of sickness or unavoidable interruption of studies) to be suspended or turned back. The academic board shall lay before the inspector a statement of capacity, etc., of each graduate, naming the arm of service for which he is best fitted. No cadet separated from the academy shall be appointed in the army until one year after the promotion of the class to which he belonged. No cadet dismissed by the sentence of a general court shall be restored to the U. S. M. A. The course of study shall be five years. A programme of instruction (pp. 20-23) is recommended for adoption.

From the report of the Committee the following remarks are taken:

The great end of the Academy is to qualify cadets for the duties of officers of all arms of the service.

The U. S. M. A. Commission is to replace the Board of Visitors.

No cadet is to sign a certificate as to the manner in which he has performed a duty.

No explanations for reports are to be required from cadets. If they choose, a verbal explanation may be made to the Commandant. If this is unsatisfactory, a written explanation may be offered.

All officials should report any offense coming to their notice.

Demerit marks are not in any sense a punishment, but merely a record of conduct.

The library should be open, at all times, to cadets of the first class.

Cadets should have full eight hours of sleep.

The Commission was much impressed by a want of thoroughness in the attainments of the lower sections of classes who are permitted to graduate. Every cadet should know thoroughly what he is required to know at all. Every cadet who cannot stand a thorough examination should be discharged.

No reduction can be made in the scientific or mathematical subjects. The Commission cannot recommend such a reduction of standard at the moment when many of the great States of Europe are endeavoring to raise it.



UNIFORM DRILL REGULATIONS IN THE ARMY AND NAVY.

BY CAPTAIN THEODORE H. LOW, U. S. MARINE CORPS.



OWADAYS, when the importance of uniformity and harmony is universally recognized, when the tendency to standardize extends to even the most unimportant details, and when much time and money are annually spent in insuring full co-operation between all branches of the national forces, it would indeed appear strange should the Navy continue the use of an infantry drill different from that about to be adopted by the Army.

The writer will endeavor to show that this difference in drills is a matter of great practical importance, as destructive of that unity and harmony so essential in all military operations. It will be pointed out that whatever in the past may have been the necessity for a distinct drill system, this necessity no longer exists. History shows in the case of allied troops the baneful effect of these differences. For while with different languages, temperaments, etc., each has contributed its share, the most potent of all these causes of weakness, perhaps, and the one which has so often prevented the successful co-operation of allied troops, is the diversity of the system of training and drilling of the different nationalities. While in this case the cause is inherent and the weakness being a necessary evil must be borne, it is not so with troops of one nationality where uniformity of drill can easily be secured.

For effective leadership the commander must be not only in a position to know how best to dispose of his troops, but be able as well at all times to mentally picture their exact position and formation. Whether they be troops of the same nation or allies, this is clearly impossible unless all have the same drill, and is equally true in the case of both large and small bodies of troops, for the smaller the number under one command the more essential, obviously, is unity of drill.

The differences existing at present in our infantry drills may be underestimated. It may be said that the systems are so much alike that the ordinary spectator could not tell the two drills apart, and that such dissimilarities as do exist

are so slight as to be of no practical importance. This, of itself, would admit the necessity of uniformity, and if the differences be so insignificant, what possible reason can there then exist for their continuance? At best they may be perplexing, and these very discrepancies in details destroy that exactness so beneficial to morale and discipline.

But are the differences so few? The writer has had the advantage (?) of drilling under both systems, and believes that several of the foreign systems resemble each other more than do our own. A comparison of the present drill regulations of the Army and Navy shows that the dissimilarities exist on every page, from a squad drill and manual right through extended order. It is in the ceremonies that the similarity is greatest, but the writer vividly remembers taking part in a parade a number of years ago, in which a militia company became so rattled by the strange commands of the Navy drills, that, to its great discomfiture, it had to be led off the ground. If this clash of drills occurred at parade, what may not have been the difficulties in extended order where the two drills differ greatly?

It may, indeed, be urged that the Marines have never had any difficulty in serving with the Army, as was recently shown in China and the Philippines. This is true, but it was largely due, it is believed, to the irregular character of the operations and to the marine officers being conversant with both drills; and even then the non-uniformity was a source of embarrassment. The adoption of a uniform drill would indeed be a boon to the Marines, and would obviate any necessity of their having to practice two forms of drill.

It can hardly be that officers, especially the younger ones, will always have such knowledge of both drills as will enable them to avoid confusion by interpreting whenever necessary the commands to their men. At any rate dissimilarities serve to create friction. No matter how slight and insignificant these differences may seem in ordinary times, in emergencies any such weakness is always liable to be accentuated and magnified beyond all semblance to its former proportions. In the strength due to unity lies the importance of abolishing any and all such differences.

It is believed that the present condition of diverse drills can be duplicated nowhere else in the world, outside of China or some equally unprogressive country; nowhere else is it

necessary for the Navy, a branch of the national forces at present nearly 40,000 strong, to practice an infantry drill distinctly different from that of the regular Army. A few years ago all the national forces barely exceeded in numbers the present strength of the Navy. The form of infantry drill used by the Navy must then be, surely, a matter of great military importance.

Leaving for the present the Marine Corps out of consideration, the fact that the Navy is not likely to serve ashore with the Army in no way justifies non-uniformity in drills. This contingency may arise any day. The outlook at present tends surely to draw closer together than ever the services, and to increase the chances of their serving, if not shoulder to shoulder, at least within supporting distance of one another. In that case, the more all dissimilarities are minimized the closer the ties and the more effective the co-operation.

Were it possible for the board on revision of the drill regulations to consider the needs of the naval service, it is felt that there could be no claim made that the drill regulations were not adapted to navy use. Indeed it should be fully recognized that the infantry drill is not alone for the use of the regular infantry but of all the national forces, including the National Guard, artillery and cavalry, as well as the Navy and Marine Corps. The necessity of having it so flexible as to be fitted for the use of these arms surely serves to render the drill adaptable for navy use as well. Surely the Navy needs no "easier-to-learn" drill than does the National Guard, nor one simpler than does the artillery, nor one of greater permanence than does the cavalry. As far as permanence goes, the Navy themselves have been the greatest offenders of late years anyway, having practiced a number of systems of drill within the last dozen years. As simplicity is now the watchword, uniformity as well as permanency should be assured, and the new drill book should be fitted for the use of all, afloat as well as ashore.

This simplicity so essential can be gained, not necessarily by omitting from the drill book all those elaborate movements that are suited only to the maneuvers of large bodies of troops, but by providing (as is done in the new British infantry training) that such movements need be practiced by regular infantry only. For while unlimited time may permit the regular infantry to extend their training farther than other troops,

it is fully recognized that as far as drills are carried they must be uniform in character for all. Under some such arrangement of the drill book, all could easily pick out only the essentials that could be taught in the time available. Thus while it is recognized that limits of time for training necessarily vary greatly in our country, uniformity is assured along with the flexibility necessary to provide for the varying local conditions of our forces. Then the Navy, along with the rest, would be sure of finding in the drill regulations exactly what it would require for its own needs.

Moreover, a military book along some such lines would meet modern conditions, which require of all fighting men certain rudimentary knowledge of small arms. As the lines differentiating the infantryman or the cavalryman from the marine or blue-jacket become less strongly marked, each must assimilate more of the fundamental knowledge of the "dough-boy." The names remain, but the common aim of all, be he who he may, is nowadays to first learn how and where to make the best use of the rifle, how to become a good all-round fighting man. For obvious reasons, that should be made as simple as possible for all, by stripping every unnecessary shred from this primary training.

All these conditions are certainly true of the Navy, where the spirit of militarism is rife from one end to the other. It makes quite a change from the old marlin-spike, spun-yarn days, when officer and jackey alike were disposed to regard "pop-gun" drill lightly, and when ignorance of infantry drill on the part of many of the officers was illy concealed. But with the passing of the sails and spars, the new military spirit arose, and now the ship is rare indeed that cannot turn out a landing party well drilled and well handled.

The increased time that men-of-war are now compelled to lie at anchor enables the crew to get rid of any tendency toward "wed-footedness" by permitting the frequent landing of the ship's battalion. Of late the necessity of these landing parties for service in foreign countries, as well as at home for purpose of drill, has become more frequent. Indeed, it is on such occasions that the need of Uncle Sam's jackeys being good soldiers becomes most apparent, for it is then that they must act under conditions similar to regular infantry. Knowledge of small arms in the Navy has also been stimulated by the increased importance assigned to target practice. This

interest extends not only to great guns, but the valuable practice and experience to be gained with the small arm is also fully appreciated. This increased knowledge and experience can lead only to a greater appreciation of the fact that the infantry drill that is best for the Navy is the same as that for the Army.

As the necessity for uniformity has, in recent years, increased, so, also, have the difficulties in the way diminished. The proposed substitution at an early date of barracks ashore for the use of the Navy in place of receiving ships, facilitates the training of blue-jackets along military lines. Again it is probably that the size of the companies in both the services will no longer differ materially, as in both the companies will be small. The value of efficient squad formation is also equally evident to both. The adoption some years ago of the "Krag" by the Navy was a long step in the direction of securing uniform drills, while the introduction of the new "Springfield" is another change that cannot but have the desired effect of further simplifying the drill. With its short barrel and light weight, it will be eminently fitted for use aboardship, and its advent would be opportune for the appearance of a new drill book, so markedly superior that all must concede that it has come to stay. This would be a blessing to all. Neither service would rest content with any but the best, so both would be equally eager to obtain the benefits of the new drill, and thus the desired uniformity would be insured.

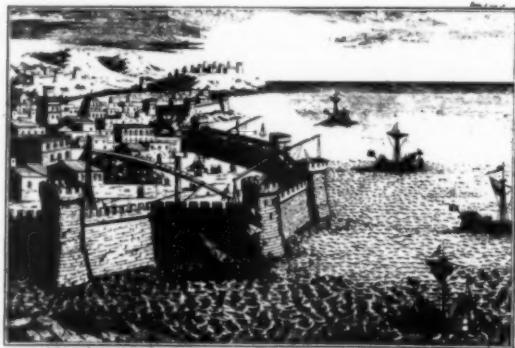
One of the chief requisites of any system of infantry drill is its adaptability to all conditions and circumstances. All troops of whatever arm of service need that drill which is best fitted to meet all the contingencies and vicissitudes of war. The Navy should require its own form on infantry drill no more than does the artillery or cavalry. If the new drill regulations, through no fault of their own, are not adapted for use aboardship, then the continued necessity of a distinct and separate drill for use there can lead to but one conclusion. It must mean the necessity of one drill for use aboard, and another for use ashore, which is plainly ridiculous.

But why all this talk about adaptation? The requirements of a good fighting man are the same the world over. Salt water does not cause him to fade, neither should it render him useless. To be sure, these salt sea waves may cause temporary paleness before there is a chance to acquire that somewhat

mysterious sea habit; but this momentary weakness can in no case be blamed to methods of infantry training, nor can it be remedied by adaptation of drill books. Indeed, the very necessity of drill books is due to the same frailty of human nature.

The material to be worked up in both services is the same—a raw recruit but an equally intelligent American. There can be but one best way to make a soldier of him, whether it be for service ashore as infantry or aboardship as blue-jacket or marine. In neither case can there be a royal exclusive system for turning out in the shortest time trained soldiers. To be sure, infantry drill cannot be given under the best auspices on a ship's decks. The broadest of them do not make ideal parades, and infantry drill on deck must be largely limited to instruction in the manual and to squad drill. But it would be idle to contend that any system in the world could be devised which would overcome these limitations as to terrain, at least not until an aerial warfare is assured. As the difficulty of drilling aboardship does not lie in the drill book, so should the remedy not be sought there; but the limitations should be acknowledged, and it should be accepted that everything practicable in such confined and broken space as the ship's decks can be done most effectively in the same manner as ashore.

The hope of seeing, on parade or on the battlefield, all branches of the service obeying and fighting as a unit, can only be realized by the adoption of a uniform drill.



L'ÉTABLISSEMENT MILITAIRE DE LA VILLE DE LA ROCHELLE, QUI SERVOIT À DÉFENDRE ET À DÉVELOPPER LES VÉGÉTATIONS.

COLLEGE DETAIL WORK.

BY CAPTAIN EDWARD P. LAWTON, 19TH INFANTRY,
PROFESSOR MILITARY SCIENCE AND TACTICS.



MATTER which should be taken up and carefully considered by the War Department is the devising a plan for the proper utilization, in future wars, of the military graduates of educational institutions where army officers are detailed as professors of military science and tactics. The enactment by Congress of the law permitting the detail of army officers at the various schools and colleges throughout the country, thus scattering broadcast the seeds of military knowledge, was an exceedingly wise proceeding and should be prolific in the results aimed at, viz.: the fitting of a large number of the youth of the country for commissions in our future volunteer armies; but this wise enactment has been largely discounted, if not nullified, by the failure to make any provision whatever for properly utilizing this crop of embryo officers after it is harvested.

The value of this adjunct to the military personnel of the nation does not seem to have been fully realized.

The young men at these institutions, brought early in life under the influence of regular army instruction, *i.e.*, instruction conducted by a regular army officer, securing in the four years at school or college more and better military training than the most apt national guardsman in twice the time, these young men with a regular army standard of discipline, unbiased by the loose methods often prevailing in militia organizations, should prove the ideal volunteer officer of our future armies.

Yet what provision is made for the utilization of this fine officer material? Practically none.

The Government at considerable expense of time and money has established and maintained this excellent system of what is almost universal military instruction, and then stopped short. Having carefully reared the flower it has failed to pluck it, has allowed it to wither on the stem.

During the Spanish War, the military graduates of these institutions, instead of securing the commissions which they should have had in the volunteer regiments, were often actually

rejected because of their very qualifications. Their standards were too high for the picnic soldiers.

Strong political influence was required to secure the most subordinate positions for these well-qualified candidates for commissions.

Could anything be more discouraging to the graduates of these institutions whose aspirations toward a military life were inspired by the Government which now rejected their services, or, even, to the army officers whose time and energies had been expended in fitting these youth for the responsibilities of commissioned officers, than to see this college work utterly ignored, to see these young men passed over for politicians or the sons of politicians, military ignoramuses whose incompetency made the concentration camps of the Spanish-American War a butt of ridicule for foreigners and a shame and disgrace to the nation?

In some of the States so low was the estimate of the necessary qualifications for commissions that absolute ignorance of things military was absolutely no bar to commissions.

It is this belittling of the military profession which does such injury to the military establishment in public opinion throughout the country.

The sooner we make the general public understand that every politician, lawyer, merchant, and what not, is not also a qualified commissioned officer ready and competent to exercise command over anything from a corporal's guard to a legion, the sooner we will inspire the respect due a profession which counts among its successful practitioners the greatest intellectual lights of all times, and among the unsuccessful, luminaries scarcely less brilliant.

This education of the masses as to the true inwardness of military skill can scarcely find a better channel than through these institutions of learning where the great mass of the most intelligent youth of the country are educated.

Bring before their eyes, then, the ideal officer and gentleman, with all the qualities, all the education, all the training, that go to make up the twentieth century military man, pick him if needs be from our cadre of officers, but let him be the right sort of model, typical of the professional soldier as exemplified in our regular army.

The soldier type thus set before these young men will never be lost to their minds. They will carry with them in all their future associations the ideal of "regular" discipline, as ex-

emplified by a "regular" officer, and who should possess, besides his military skill, the qualities of firmness, strength of purpose, patience, courtesy, justness, system, method—qualities which all men respect and which become enhanced in value beneath a uniform.

All recognize the benefit of this military training on the youth of the land; even the layman, the erudite pedagogue, takes time from his bookshelf perusal to gaze with something of pleasure on the manly, upright forms of his uniformed disciples.

On the campus, in the class room, these young men are trained in the ways of the professional soldier. Short as the period of instruction may be, it is the genuine article and is bound to have successful results in a majority of cases. The germ of the future officer lies here, second only to the cadet at West Point.

Let our War Department more fully realize this, let them not neglect this valuable asset.

Some of the finest specimens of young American manhood are among these college cadets, embryo Logans if not Grants and Shermans.

Provision should be made for utilizing this valuable volunteer material.

The concession of a few possible appointments to the regular army each year (to the graduates of these institutions) may have the effect of stirring the ambition of a few of these young men, but it is absolutely without bearing on the general question of the utilization of the military product of these schools and colleges.

It is not as a source of supply for officers of the regular army that we look to these institutions, though they might, with great profit to the army, supply the quota from civil life, but as training and testing schools for the future officers of the mobilized forces of the nation.

We have West Point and the enlisted force of the army to supply our regular officers. With all the great institutions of learning of the country supplying the volunteer officer force, trained under regular army officers, it would seem to the writer that an ideal system in perfect accord with our republican institutions will have been devised for supplying our volunteer armies with competent officers.

That this was the intention of the authors of the statute

providing for the detail of army officers at educational institutions there can be no doubt, but that these intentions have been rendered null by failure to properly elaborate the scheme seems to admit of no less doubt.

A plan must be elaborated by which the general Government may keep track of these young men, may, if possible, keep up their military interest and training after their graduation, and thus do away with the feeling prevalent among them now that the Government has no further use for them, that in serving as a cadet they have canceled all military obligations and may proceed to rid themselves as rapidly as possible of every soldierly thought and interest.

There are undoubtedly exceptions, men who carry with them throughout life not only the effects of this early military training, but who never lose interest in things military. The spark of military ardor is kept glowing within some of them, probably to blaze up in the crucible of war, but it is inherent in these cases, and not due to any encouragement from our military authorities, whose attitude would seem to indicate that they feel, with these young men, that not only obligations but all interest on both sides cease when the cadet graduates. The Government is through with him, he is through with the Government.

It will be claimed that this foundation of military knowledge will bear fruit of itself, that these young men thus imbued with the instincts and partial training of soldiers will come to the front when needed and serve their country valiantly and efficiently—and so they will, some of them; but it will probably be after years of forgetfulness of all things military, after years during which their military ardor will have gradually cooled for lack of the slightest spur of interest from the Government that gave them their early training. The result will be that they can scarcely be distinguished from the mass of ignorant recruits who volunteer for war, all traces of skilled military training will have disappeared from them, and it is extremely doubtful whether they would prove any more efficient than the average civilian without previous training.

This should not be. These young men trained at some cost to the general Government, many of them the very flower of the youth of the land, should be made use of, should have their talents and training turned to account of that Government. Some plan must be devised for keeping their interest

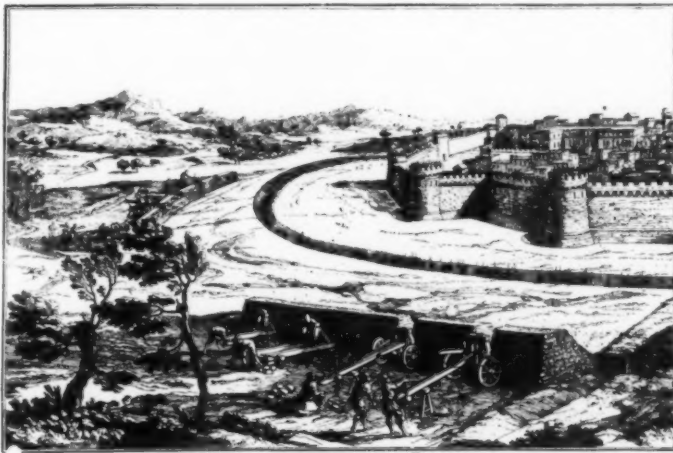
in things military constantly stimulated, for preventing this utter forgetfulness of their early training.

This can be done by official recognition of them as the preferred candidates for future volunteer commissions.

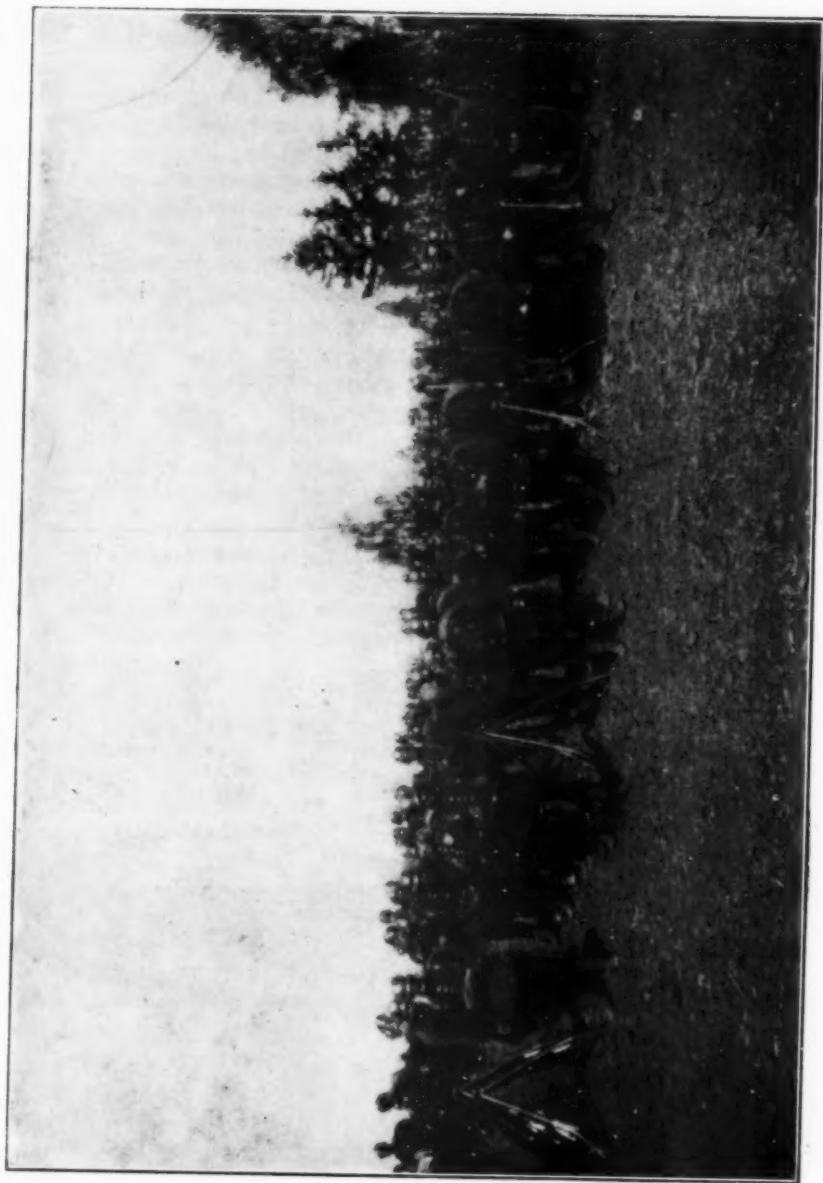
They will thus feel that the Government has its eye on them and may at any moment quicken their military instincts and aspirations into life by commissioned command in her armies.

The annual maneuver fields now being arranged for will offer excellent facilities for post-graduate training of these embryo officers.

THE PENNSYLVANIA STATE COLLEGE,
January 26 1904.



BATTERIE DE BALISTES ET DE CATAPULTES



GERMAN INFANTRY



THE KAISER AT THE MANEUVERS.

THE KAISER MANEUVERS—1903.

BY CAPTAIN D. W. C. FALLS, N. G. N. Y.,
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HE late summer and early autumn are busy times for that vast military machine known as the German Army. Starting in July with regimental field work, the forces of the Empire have been gradually working up, through brigade and division maneuvers, until about the first part of September, when the army corps are consolidated. Then throughout the different parts of the country there is a week of marching, fighting, and general instruction in grand features for every one. Each year, at some point selected by the Emperor, there is a larger mobilization, and what are known as the Grand or Kaiser Maneuvers take place. These last about five days, and the force consolidated is generally four army corps of 20,000 each, or 80,000 men in all. The part of the country selected differs annually, and every army corps gets thus extended work about once in five years, the organization of the German Army being at present twenty army corps. Though the Emperor frequently goes to the smaller maneuvers, it is in a semi-official manner,

while the Grand Maneuvers are always attended by him in full state. He is accompanied by the reigning king or prince of the section of Germany in which the mobilization takes place, his personal and the headquarters staff, distinguished foreign visitors, and the military officers of different countries attached to the embassies and legations in Berlin. In addition, there are the local military and civil officials, all of which make a brilliant gathering.

The Kaiser Maneuvers for 1903 were held in the vicinity of Leipzig, on the frontier of Prussia and Saxony, and the opposing armies were officially known as Prussians and Saxons. The country is admirably adapted for the evolutions of large bodies of troops, being fairly level and open, with convenient railroad accommodations. In addition it had great historical interest, as within the maneuver area were the battlefields of Leipzig and Rossbach. Level and open may not appeal to the American soldier, whose instruction has been to select a country where cover is plenty and troops can be moved without observation. But the Germans still believe in having their field work where every movement can be seen and criticized. The chance of doing any damage to the farms was very slight, as the people had been notified well in advance, and all crops were harvested, and the country practically put in condition for the maneuvers. The Prussian Army, composed of the 4th and 11th Corps, was mobilized in the neighborhood of Halle and Merseburg, and the Emperor's headquarters, while with this army, were at the former place. The Saxons had Leipzig and vicinity for their point of mobilization, and they brought into action the entire military force of that little kingdom—the 12th and 19th Army Corps. Their headquarters were in the city, and though not in active command, the army was accompanied by King George of Saxony, who entertained the Emperor at the royal residence during his visit to the Saxon Army. All troops on mobilization were billeted, and a short description of the manner in which this is carried out will give an idea of how the people each year contribute their share to the great war game. Every official, whether a burgomaster of a small town or an alderman of a section of a city, is required to keep a list of every house, barn and stable, and the exact number of accommodations at each, for men and horses; also the cooking facilities of each house and how many men can prepare their food there. The troops,

on arrival at a village, or public square of the city, are met by the official who presents his list to the officer in charge of the billeting. The men are told off, so many to each house, according to the number it can accommodate. In the city, as was the case in Leipzig, certain streets were assigned for the use of the troops. Where stable room can be found, it is used, but there are rarely more than enough empty stalls to stable the officers' mounts, so that in the cavalry and artillery regiments the horses have to be put on a picket line. The householder is obliged to receive the men billeted on him, though the place provided for sleeping may only be on the floor of the kitchen, or attic, or the loft of the stable or barn. He must also see that they have facilities for cooking rations for the number of men billeted on him, and a place to water and feed the horses. He is not expected to furnish any supplies, though should it be necessary to procure some from him, he must let the men have what they require. These are paid for at once, in cash, by the officer who orders them or vouchers are issued which are presented for collection to a commission of officers detailed to visit the section immediately after the maneuvers have terminated. All complaints for damage done are also presented at the same time and the case investigated and settled. The Government is very liberal in arranging and paying all just claims, but woe to the man who tries to impose on his Majesty's commission.

The orders governing the behavior of troops while billeted are very strict and the penalties most severe for any soldier who violates the regulations and causes unnecessary trouble or annoyance to his impromptu host. This manner of quartering troops is looked upon with horror by the average American or English householder, and great sympathy is expressed for the poor down-trodden, army-ridden people of Germany. Such sympathy, however, is entirely wasted. Strange though it may seem to the good people of a certain Long Island town, who refused to allow a battery of artillery on a practice march to even camp within the town limits, the people of Germany hail the coming of the troops with delight. It is really not very hard on any one individual, as the maneuvers are so arranged that a different part of the country is selected each year, and it may be fifteen or twenty years between the visits of the soldiers to the same section. The coming of the troops always means a general holiday. Factories and schools are

closed, and the maneuvers, coming as they do in the autumn, the farmers have plenty of leisure to enjoy the novel sights and scenes. Then into the smaller towns comes a breath of the great outside world, and lucky the family who draw on a billet of men of the Guard Regiments. These are straight from Berlin, and are sure to have all the latest court and political gossip. They know the newest jokes and popular songs, and can tell wonderful tales of duty at the Royal Palace and the great functions and ceremonies they witnessed or had taken part in. Then we must not forget that in Germany nearly every man has been a soldier, and to-day living all over the country are men who fought at Gravelotte and Sedan, and who lay in the snow-covered fortifications around Paris in the dark days of '71. Once a soldier always a soldier, and into these veterans the sound of the drums and bugles puts new life. Happy are they to again see the blue uniforms about them, and many is the bottle of wine opened or the barrel of beer tapped for the entertainment of the billeted soldiers, for which no charge is ever made to the Royal Commission. Many an old veteran with his medals on his coat presides in the evening over a feast set for the benefit of his unknown guests. The best the house affords is brought out and, surrounded by the uniforms he loves so well, he hears the latest army news, and gossips and fights his own battles over again to an audience of appreciative listeners. For great is the reverence shown to old soldiers by the active army, particularly if they have taken part in the stirring times in the past for the glory of the Fatherland. Then there is another feature that appeals to everyone far and wide in that music-loving country—the regimental bands. How the peasants and the people of small towns do enjoy the music! and if possible, a grand concert is given for their benefit at some time during the maneuvers. These are all the enjoyable features, but we must not forget the business end of it, and the chance for everyone in the neighborhood to make a little extra money. The great mobilization of troops, the presence of the Emperor and other distinguished people, is sure to gather a large crowd of strangers. These people must be housed and fed, and as they do not have the benefit of the billeting law, the lucky householder, if he has rooms and provisions, gets twice or three times (and I fear, when he provides for foreigners, five and six times) the regular price. Even when extra supplies

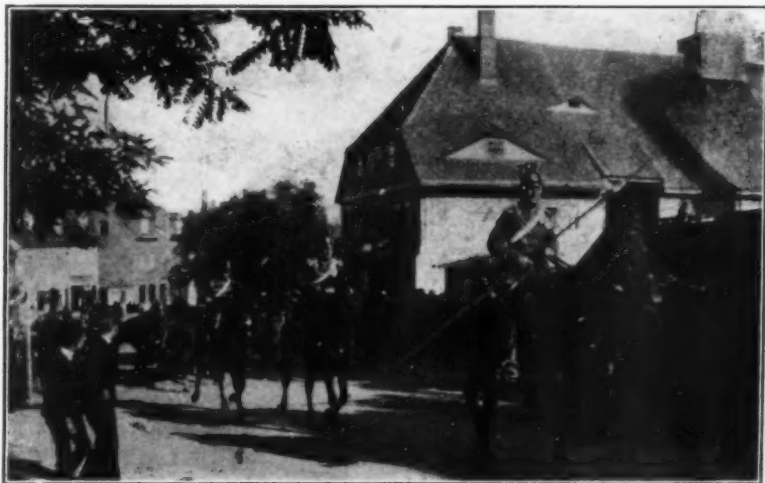
are laid in, it is difficult sometimes for the outsider to procure anything. The writer recalls arriving at a small village just after it had been evacuated by a division of infantry. There had been some trouble with their supply train, and a swarm of locusts could not have cleaned up the town in a more thorough manner, as far as the food and drink were concerned. All these supplies being necessary, were paid for, and you can readily see what a harvest it had been for the little village. Our numerous inquiries were always met with the same reply. Nothing could be had for several hours, until the carts of the village returned with the supplies from a neighboring town. Finally some very thin milk was discovered, and on this we made our midday meal, supplemented by cakes of chocolate from a penny-in-the-slot machine at the railway station. Why this had not been used up, also, we could only account for by the fact that it did a strictly cash business, and no government voucher, no matter how often countersigned by superior officers, could force it to give up its supply.

The maneuvers for 1903 began with the mobilization of the troops on September 2d, and were over on the 10th. The Prussians came in on the 2d and 3d and the Saxons a day later. Where it was possible the troops marched from their regular stations. All wore full-dress uniforms throughout the entire maneuvers and carried about 56 pounds of baggage, consisting of a cowskin knapsack, with mess tin on the back, shoes strapped to the sides, overcoat, part of shelter tent, haversack with rations, water bottle and blank ammunition. The marching and maneuvering were done in an old coat, while each soldier carried in his knapsack his second best coat (his best is left behind in barracks) and white trousers. These were for the grand reviews by the Emperor that preceded the field work. The Prussian review took place at Merseburg on the 4th, and the Saxon at Leipzig on the 5th. The day before, in each case, had been a very warm one, and the troops had arrived at their quarters in a hot and dusty condition. The evening had been spent in cleaning up, and at eight the next morning all turned out in spick and span condition, immaculate white trousers, and looking as if they had spent weeks in barracks preparing for the event. Both reviews were exactly the same as far as formations and general appearances were concerned. The troops formed in two

lines, infantry in front in line of battalions at half distance. The cavalry and artillery and train in the rear, in the same formation. The Emperor, accompanied by the King of Saxony and followed by the most brilliant staff of over a hundred officers, rode down the lines. The troops then changed direction and marched past twice. First at full distance, and then the infantry en masse. The cavalry at a gallop and artillery at a trot. These were only line regiments and not the crack Guard Corps, but the alignments were excellent, though the ground only an ordinary field, and the companies equalized at sixty files front. The review at Leipzig being near the city was attended by a vast number of people, and the Emperor received a most enthusiastic reception from the loyal Saxons. To accommodate the enormous crowd the corporation of Leipzig erected a vast grand stand to hold 30,000 people, at prices from five to twenty marks a seat, according to location. All seats were numbered and the arrangements for handling the people excellent. That evening the corporation entertained the Emperor, King and other guests at a banquet in the Casino of the Palm or Public Garden of the city. After dinner a grand concert was given by the massed bands of the 19th Army Corps, composed of about 1500 musicians under the senior bandmaster. The next day being Sunday all were allowed to rest, in anticipation of the hard work before them. Still among the officers there was much going on. Schools of instruction were held by brigade and division commanders. Plans discussed, maps consulted, and a general busy air prevailed at the different headquarters. Among the men, however, everything was peaceful and quiet. A German soldier does not worry himself about what is going to happen. When the time comes for him to do anything, there will be an officer to tell him what to do. What the effect would be if the officer should not be there at the critical moment is a question that has been given much thought to the outside military world for years. This dependence on the officers, as well as the absolute obedience to their orders, was most noticeable throughout the entire maneuvers. Men would halt and remain standing at ease in the broiling sun, while a step to the right or left would have brought them under a tree or in the welcome shade of a wall or building. But not a man moved from the exact spot he had halted on without orders. Also on the firing line he waited for instructions

before taking cover. This absolute obedience is not confined to the men but extends up through the different grades of non-commissioned officers and officers. Colonels ordered to march their commands by certain roads absolutely marched on that road, when by moving their men over to the grass at the side, they could have prevented the raising of clouds of dust. Not only could this be observed by the enemy at a great distance, but it covered the uniforms and filled the lungs of the men of the column.

War was supposed to be declared at midnight, Sunday, and by half-past one in the morning the first of the opposing



UHLANS PASSING THROUGH VILLAGE.

armies started, though three o'clock was the hour for the main bodies to move. In Leipzig, though it was still dark, all was bustle and excitement, and by four the city had been evacuated, and the Saxons were on the march in the direction of Merseburg. The cavalry scouts came in contact about five, and by the time it was light enough to send up the war balloons, the main advance of the Prussians was discovered to be along the west bank of the River Saale. As they were not in great force they were quickly driven back, and then occurred one of the most interesting things of the maneuvers. This was

the sending of the entire Saxon Army of 40,000 men across the river. But one bridge was available and it was necessary to build two more perth pontoons. This construction was another illustration of the wonderful discipline and human machine-like work of the German service. The pontoon trains were brought up from the rear and the work started. Each man knew exactly what to do and not a minute was wasted. Every man had a certain handle to take hold of, a certain rope to pull, or a tool or piece of timber to deliver to another man at a certain time. Having done this he at once proceeded to his next position, and so on like clockwork. Not a bit of confusion, not a word spoken by the men or an unnecessary order given by the officers after the work once started. It was a most wonderful exhibition of mechanical drill. Still one could not help wondering what would have happened if the enemy had been shooting real ammunition. What would number five do when he arrived with something for number six and there was no number six to give it to? Would it be like a smoothly running cogwheel when some of the cogs were knocked out?

The entire Saxon Army crossed the river and drove back the Prussians to the high ground before Meresburg. The fighting was now on the historic field of Rossbach, and the view from the high ground around the battle monument was a superb one. Large parts of both armies could be seen, though that was hardly modern warfare according to our ideas. Troops advanced in brigade and division formations. Long lines of mounted skirmishers swept across the plains, with masses of cavalry in reserve, while whole regiments of artillery galloped into positions and fired together. There was not a cloud in the sky, and every button, helmet and lance glistened in the sun. Everywhere could be seen the umpires galloping about, distinguished by their white helmet covers and white brassards on their arms. They were busy taking notes of everything and made their reports to the Chief Umpire after the day's work was over.

At three o'clock, the troops having been on the ground for twelve hours, work for the day was declared off. Signals were made to that effect and all the troops stopped where they were. Those lucky enough to be in or near a village were billeted, while their less fortunate comrades were obliged to bivouac on the ground where they had halted. Fires were

soon going, and the supply wagons coming up, the first hot meal of the day was prepared. Before that each man had carried his own loaf of bread and a sausage, and eaten when he felt like it and had the opportunity. Hostilities did not begin again until after nightfall, and a commander under cover of darkness may make a different distribution of his troops, knowing that they might have to turn out at any time during the night; both officers and men after their supper wasted no time in getting to sleep. Each man carried a portion of a shelter tent on which he sleeps on clear nights, and joins to that of one or more comrades making a tent for bad weather. No blankets are carried, the men using their long and loose overcoats instead, with a knapsack for a pillow, and twelve hours of hard work back of them, it did not take the armies long to settle down. A trip along the lines just after sunset found absolute quiet everywhere, and no one stirring except the unfortunate guard on duty over the arms, equipments and fires.

While the troops have been marching and fighting, the Emperor as Chief Umpire has also had a busy day. He always visits all parts of the lines of both armies, and for this purpose has relays of saddle horses at different points, to which he travels in an automobile. Four of the latter are at his disposal, and he would unexpectedly appear at some important point, mount a waiting horse, ride across country to where another auto was stationed, and disappear in a cloud of dust to some other point of observation. He was attended only by a few personal staff officers, as his actions were a little too strenuous for others of the Royal party. These distinguished guests, under the guidance of officers familiar with the plan of action, were taken either by trains or automobiles to some important point where their horses were in waiting and interesting parts of the maneuvers could be observed.

On Tuesday and Wednesday about the same program was carried out. The armies maneuvered about, first one advancing and then the other.

The last day was rather a spectacular show for the benefit of the distinguished guests. The armies were arrayed opposite each other, the cavalry consolidated, and led by the Emperor in person, came the famous cavalry charge that always ends the maneuvers.

The Royal party disbanded and the troops started back the next morning for their different stations. The maneuvers for 1903 were considered most successful, in spite of the extreme heat. The men stood the strain splendidly and there were few cases of illness. The work was hard, but all seemed to enjoy it, and I heard many officers express regrets that it was all over, and they had to return to the humdrum life of barrack and drill.



THE REVIEW AT CLOSE OF MANEUVERS, 1903.

MAP
SHOWING
AGUINALDOS'
WANDERINGS



THE WANDERINGS OF EMILIO AGUINALDO.*

BY CAPTAIN WILLIAM B. COCHRAN, U. S. ARMY,
TWENTY-FOURTH INFANTRY.



WITH the fall of Malolos, in April, 1899, all pretense of centralized Filipino government ended. There was still, to a certain extent, a guiding spirit in the field; the two Pilars, Luna, Tinio and other insurgent generals, in Northern Luzon, recognized Aguinaldo as generalissimo, and although the transmission of orders from the head of the army to his subordinates, operating in different sections of the country, was difficult, yet he was the insurgent chief, and, in his retreat, made a defense at San Fernando, Angeles, Bacolor and Tarlac, along the line of the Manila-Dagupan railroad.

On the 13th of November, 1899, he left Bamambang at night by train, accompanied by several members of his military and civil staff, his wife, sister and mother, the Cavite battalion and one company of artillery, thoroughly unfit for service. At Calasiao he disentrained and marched to Santa Barbara, where he was joined by General Pilar's brigade, which augmented his force to about 1200 men. These forces were divided into a van-guard, composed of about 250 men, with which he and his wife traveled, and a rear-guard, to which his mother and son were intrusted; this rear-guard was scattered at Manaoag on November 16th by a column of our soldiers, and only Colonel Joven and seventeen of these soldiers ever rejoined Aguinaldo.

From Santa Barbara Aguinaldo continued his flight through Manaoag, Pozorrubio, Alava, Rosario, Arangay, Baong, Naguilian, Balaong, Candon, Salcido, Cervantes and Bontoc, being in each of these towns on the date indicated on map. He was kindly received by the inhabitants, but the American soldier was always too close for a thorough appreciation by him of the hospitality extended. First one column and then another would strike his trail and press so close, often only one or two hours behind, that he with his followers, now reduced to about 100 men, had to leave the settled country

* From his abandonment of Bamambang until his capture at Palanan.

and go to the mountains for safety. From leaving Bontoco on the 4th of December, until his arrival at Escaris, in the Cagayan valley, on January 7, 1900, he wandered from one Igorrote settlement to another within the western half of the small circle indicated on the map, the topography of which is omitted on account of the small scale on which the map is constructed, but the terrain consists of rugged mountains divided by swift-flowing water courses. He was often without food or shelter and in constant dread of being attacked by the Americans, to which was an added danger of treachery on the part of the Igorrotes.

As about one-fourth of the time under consideration was spent by Aguinaldo among these savages, a short account of their mode of life seems pertinent.

There is nothing so wild in nature as savage man. To appreciate the feelings of Robinson Crusoe's man Friday, when he discovered the human footprint in the sand, one has only to wander a short distance in the Igorrote country: the sensation is realized when a black, human form, clothed only in a breech-clout, is seen skulking in a bamboo thicket or in full flight at the approach of the white man.

The Igorrotes are savage tribes of the mountains, living generally in small settlements remote from civilization. Their bamboo houses are just large enough to accommodate the family for sleeping purposes. Their staple article of food is the "camote" or sweet potato, which grows without cultivation. Their weapons are rude bows and arrows and hard wood lances. A wooden shield is used for protection when they engage in battle with a neighboring tribe. The "Kanao" is a feast which the Igorrotes celebrate in each settlement when they secure the head of an enemy by means of battle or treachery. The head is taken to the house of the chief of the tribe, when the celebration is held. It is put on the end of a pole, a lighted cigar placed in the mouth, and the participants in the celebration approach the head successively and suck the dripping blood. All then dance around the head.

EXTRACTS FROM SEÑOR VILLA'S DIARY.

So much for Aguinaldo's surroundings at this time. The following extract from the diary of Señor Simeon A. Villa, a member of Aguinaldo's staff, will give an idea of his plans and thoughts:

"December 16, 1899.—At 6 P.M. the Honorable President named the following as members of a council to take place this night: Colonel Sytiar, Señor Barcelona, Director of the Health Department; Señor Villa, Sub-Inspector of the Staff; Señor Paez, Second Chief of Staff; Majors Jecial and Catmaitan, and Captain Pilar. After these had assembled in meeting, presided over by the Honorable President, in a thicket not far from our camp, the Honorable President explained a very critical state of affairs, viz.: That the Americans had taken Bamambang and hence we could not go further forward; that there were Americans behind us; that they were pursuing us and had already arrived at the Sagada settlement; that our situation here in Banane is very dangerous, because not only our enemies, the Americans, in front of us and behind us, but the very Igorrotes who surround us, including those at Banane, are also our enemies, only awaiting the opportunity to cut off our heads, just as happened to Capt. Villa Real's soldiers, who, sent on in advance to these settlements, were attacked by the Igorrotes, and as a result we had to lament the loss of three guns captured by the Igorrotes, besides three soldiers and a woman wounded.

"Having explained these things, the Honorable President then asked Captain Pilar what opinion he had to express. The latter replied that he had no opinion to express, but that he agreed with the Honorable President's declarations; but Colonel Sytiar answered this, saying that Captain Pilar's remarks were not to the point, as we were all under the Honorable President's orders and ready; what was required was that the captain should freely express his own personal opinion. On hearing this, Captain Pilar replied in the very same phrases he had used at first. Therefore seeing that he could not draw out anything that would throw light on the question under discussion, the Honorable President asked Major Gatmaitan for an expression of his opinion. That gentleman replied, that for him, he would wait for either the Americans or Igorrotes, who might come to attack us in this settlement, and that he, in conjunction with our soldiers, would maintain the defense until death. The Honorable President seeing that this opinion was not conducive to the desired end, then said to Señor Villa that it was his turn to express any opinion he deemed expedient. This gentleman replied that, considering the remarks and observations of the Honorable President, together with the motives of the meeting, he was of the opinion, first, that we should separate from the women, who constitute such a great impediment to any plan we might form; and as to that, if the Honorable President would not consider it in a bad light, he would send the women to Manila accompanied by two trustworthy officers, selected by himself. In the second place if, the Americans who are behind us, and in front of us, wish to advance toward us they could do it very easily with the co-operation of the Igorrotes of these ranches, in which case the person of the Honorable President would be in danger. In view of these conditions, he believed that we should march away from this ranch as soon as possible, and either set out for Abra Province or else join forces with General Tinio, so that the Honorable President having arranged in this matter for an available force of 2,000 men, nobody could poke fun at us, whereas we, on the contrary, would have to be reckoned with and respected.

"The Honorable President then called on Major Jecial, Señores Paez, Barcelona and Sytiar to express themselves. All these

replied that they agreed with the opinion expressed by Señor Villa. The Honorable President stated that he agreed with these plans himself, believing them to be most efficacious. In this way the meeting was brought to a close at 9 o'clock at night, and the Honorable President charged the members to keep secret the proceedings.

"After the meeting, it being a moonlight night, the Honorable President, Sytiar, Jecial, Barcelona, Villa, the Leyba sisters and the Honorable President's mother were conversing, and agreed that as soon as the independence of our country is established we will all take a trip to Europe with an allowance of one million dollars to pay our expenses.

"Our life on this ranch is as follows: All get up at 6 o'clock in the morning and prepare breakfast. Breakfast takes from 9 to 10 o'clock, after which the time is devoted to conversation, groups of from eight to ten individuals being formed. At 3 o'clock they prepare dinner, which is eaten at 5 o'clock. After dinner there is conversation until 8 o'clock, when we all go to rest. The 'Banane Breakfast,' named by the Honorable President, consists of coffee and fried camotes."

About this time it was decided to leave all the women behind at Talubin, a settlement of the Igorrotes, and allow them to be captured by the column of the Americans reported at Bontoc, only about two hours distant. Affectionate farewells were said and Aguinaldo set out, but after marching half a day, decided that he could not bear the separation, so a courier was despatched in haste to Señor Sytiar, who was left in Talubin in care of the women, with orders for them to be sent out at once to rejoin Aguinaldo. Señor Sytiar demurred at the receipt of this order, because he had already written to the American commander at Bontoc offering to surrender these women. They were finally turned over to the Americans and sent to Manila.

Aguinaldo had with him now eleven officers and 167 soldiers. Señor Villa's diary mentions that at one time a horse was killed for food, and that they were attacked several times by Igorrotes before they arrived at Escaris, in the Cagayan valley, on January 7, 1900.

The Cagayan valley, in the extreme northern part of Luzon, is one of the most beautiful and fertile regions of the Island. In extent it is about 250 miles long and from 20 to 40 miles broad. It is the great tobacco district of the Philippines, Isabella province, in which Escaris is located, being especially noted for this product. The stalks grow to a height of six feet and the bottom leaves are often eighteen inches broad. It is a rich country, and at this time was occupied by one regiment of infantry scattered from Bamambang on

the south to Aparri on the north, and from Piat on the west to Malunu on the east. There was approximately one soldier for every five square miles. Therefore, a small town situated away from the usual thoroughfares of travel was a pretty secure haven for this band of fugitives. Here they even indulged in the excitement of horse races.

Señor Villa's diary of February 7th is of interest:

"Dominga Calinga, the deserter who arrived yesterday, was tried by drum-head court-martial this morning at 8 o'clock and sentenced to death for said desertion. The execution will take place by decree of Señor Villa. The prisoner was formally notified of his sentence at 10 o'clock.

"At 3.30 sharp there was another horse race in which the horses of Señores Carasco, Subido and Cansio took part, the latter's horse winning.

"At 4.30 the troops formed to take part in the execution; at 5 o'clock the criminal was escorted to the field where the troops were formed. The Honorable President, on seeing that the criminal had already been carried out to be executed, at once wrote out an order of pardon and immediately dispatched it by a courier so as to save the criminal's life. When the courier arrived at the place of execution, he found the criminal was already blindfolded and ready to be shot. The Judge Advocate, after perusing the pardon, read it aloud in the presence of all and immediately everybody cried out, 'Hurrah for the Honorable President; Hurrah for Independence!'

"At midnight the Honorable President received several letters from Manila and Hong Kong informing him of the political status of the present war, and the disastrous effects produced upon the enemy by our army, all of which is very satisfactory for our cause. The said letters were sent by our committee at Hong Kong and by Señor Espartaco of Manila. The latter also mentioned the frenzied condition of the Manila people, who are ready to drink the enemy's blood."

On February 11th Aguinaldo was again driven, by the approach of the American forces, to seek safety in the mountains. His life and adventures were about similar to his former wanderings among the Igorrotes. At one time he, with his few followers, would make plans for the future when independence should be established, agreeing that each Barcelona, Villa and Carrasco should have 13,500 acres of land as a recompense for their work, and that the plantations should be located adjoining one another. At another time, about April 8, he plans an attack on Banguet which is not executed.

In camp at Iabugan, where he remained for more than a month, he is joined by General Tinio on the 12th of April, and the situation is discussed. General Tinio remained at that time in Aguinaldo's camp for three days.

During the early part of May continued reports are received of the approach of the Americans from different directions. On May 17th Señor Villa states that "Every puff of wind seems to carry in suspense news about the coming of the Americans. Just as the Honorable President awoke this morning at 6 o'clock, he found an Igorrote of this settlement who told him that in Sumader, a settlement one hour's distant from this one, there were Americans en route here. As soon as we were aware of the presence of the Americans in Balbalasang, we knew that their plan was to shut us in on all sides for the purpose, perhaps, of capturing the Honorable President. He, on receiving this news, at once sent a courier to Sumader to see if the Americans were already there. The man returned at the end of an hour and told the Honorable President that the Americans were eating breakfast when he left that settlement. The Honorable President thought of making a resistance, but did not have sufficient forces for that, nearly half of our soldiers being sick, so he deemed it expedient to abandon camp. In fact, at 8 A. M. he left the settlement, following the route to Guisang in order to gather up some of our soldiers on duty there."

Aguinaldo seems to have been closer pressed by our forces, from this time until his arrival in Enrile, on the 28th of May, than at any other time during the course of his wanderings. Once or twice his forces are engaged with the American troops, but in each instance he manages to escape by taking advantage of either the darkness or difficult terrain.

It appears that, in a desire to celebrate his rejoicing at eluding his enemies and also of his return to civilization, Señor Villa is despatched in advance, to Enrile, to announce Aguinaldo's approach. He is even authorized to send out invitations to a dance, and invites all the principal people of Tuguegarao and Enrile to participate. Two brass bands and an orchestra are secured, and at 12:30 P. M. the Honorable President and all his escort entered the town, being received by large crowds of people, the bands playing the national march of the Filipinos. At 3:30 the next morning he left Enrile, taking the direction of Naguilan. Always keeping away from all traveled trails, the party continued up the valley of the Cagayan until they arrived at a spot known as "Tierra Virgen," which was reached on June 8th.

Tierra Virgen is located in an almost impenetrable bamboo

thicket, which extends from the eastern bank of the Cagayan river to the mountains. There were no dwellings at the place selected, which was about eight miles from the town of Naguilian. There is only one trail leading to this locality and that was completely obliterated by an ingenious method that the Filipinos have of dragging old trees across trails that they wish to conceal and covering them for several hundred yards with leaves so that they appear to be blind, and resemble many others that are simply made for dragging the bamboo out for use.

Aguinaldo's presence was known to all the inhabitants of Naguilian and Gamu, a neighboring town across the river. The people of these towns furnished them with supplies, and were what might be termed true patriots. There was no American garrison in either of these towns at this time. On January 8th Aguinaldo sent Lieutenant Dayao to Palanan to receive the rifles which were going to be disembarked there, according to letters received from the Hong Kong committee.

Rumors of a contemplated attack continued to be received, through friends in Naguilian, and so finally, on the 27th of August, the camp at Tierra Virgen is abandoned, Aguinaldo having stayed there two months and twenty days.

It was determined to cross the mountain ranges to Palanan, on the Pacific coast, which they reached, after numerous hardships, on September 6th. To the people of this place Señor Villa was represented as the chief of the column, assuming the name of Capt. Santos Baltassar, and Aguinaldo, as his secretary, went under the name of Lieutenant Esteban.

In Palanan the time was consumed by a series of feasts and in vain expectation of the arrival of the ship from Hong Kong with the rifles and ammunition which were said to have been dispatched. These Elysian dreams were rudely dispelled on November 22d, by a column of our forces sent over from the Cagayan valley. Aguinaldo resorts to his usual tactics, hiding in the woods, until the Americans withdraw, when he returns to the town.

On December 8th he is rejoined by Major Alhambra and forty soldiers from Casiguran. All the inhabitants of Palanan are put to work constructing trenches along the trail leading to Ilagan.

The concluding paragraph of the diary of Señor Villa is as follows:

"March 7, 1901.—The Honorable Dictator received a letter from Señor Mabini, dated the 22d of November, 1900, transmitting messages from the American Generals McArthur and Bell to the effect that our independence cannot be ceded, and that the Honorable Dictator may retire to Manila under conditions of his having to live at the Palace of Malacanan with McArthur. As to himself, Señor Mabini inquires of the Honorable Dictator whether he will have to advocate independence or autonomy, seeing that McKinley is already re-elected.

"The Honorable Dictator answered Señor Mabini's letter, instructing him to thank General McArthur, in his name, for the invitation, but to say that the Filipinos, in arms, desire nothing less than the independence of the Philippine Islands."

On March 23d Aguinaldo was captured by General Funston with a company of Macabebe scouts.

Aguinaldo had written for additional soldiers and supposed these Macabebe scouts to be the men he had asked for.

As to this being the only way in which his capture could have been effected opinions differ. That it was a perfectly legitimate ruse of warfare remains unquestioned, and the one thing certain is that numerous other commanders had worked brain and muscle to accomplish this end and had failed.

Was it the fault of the soldier or the system?

May I ask how much money was spent for secret service work during the year and five months in which Aguinaldo roamed over a small section of Northern Luzon?

I do not know that one cent was ever spent in the Cagayan valley for this purpose. The only remuneration that friendly natives could hope to receive was gained from turning in to our Government such arms as they could get possession of, receiving for each rifle thirty pesos. Naturally, the Filipino chieftain, surrounded by friendly and kindred inhabitants, obtained the best results, in this regard, for nothing, but there were Filipinos, and reliable Filipinos, that could have been employed as spies for our forces.

The recognized head of an insurrection is always an important personage, and Aguinaldo was especially so because, to the mass of ignorant workingpeople, his person was clothed in a kind of divinity. Their idea of him is expressed by a trustworthy native who located several small bands of insurgents for our forces. This native was asked why he did not find out where Aguinaldo was. He replied that Aguinaldo was divine and would know his presence and purpose before he could approach within ten miles of him.

It was forecast that the capture of Aguinaldo would practically end the insurrection. It is my belief that a well-organized secret service could have been the means of accomplishing this one year sooner than it actually was effected by other means.

Aguinaldo was superior to his race in mental attainments. He was fond of display, as are all Filipinos. That he endured great privations and suffering in the course of his flight is undoubted, but the stakes he was playing for were high. Think of that planned million-dollar trip to Europe and that visionary division of land among his followers!

In attempting to analyze his character, it may be well to state briefly how he first became prominent in Filipino affairs.

At the age of twenty-seven he made numerous speeches in Cavite, urging the Filipinos to rise against the Spaniards. This was in 1896. The people were willing to rebel, but they had no arms or ammunition. Aguinaldo convinced them that these things were easy of attainment. At the very time of one of these meetings, it happened that there were two soldiers of the Guardia Civil in the court-house. Aguinaldo, accompanied by his godfather, Candido Tirona, went to the court-house, and asked them to surrender; they refused, and he and Tirona seized them and secured their arms. They then prepared a communication to the municipal heads of the Provinces of Cavite, Batangas and Laguna, asking them to rise against Spain and stating that their own town of Cavite Viejo was already freed from slavery. On the following day one of the towns took up arms, and Aguinaldo, with many people of Cavite, marched to Imus. The people of this town placed themselves under his leadership, and went with him to the convent in which were the Friars and the Guardia Civil. When they arrived at the atrium of the church, his companion would not follow him, for fear that the Spanish soldiers would shoot at them from the church tower. Aguinaldo advanced alone, went upstairs and found no one, the soldiers of the Guardia Civil having retreated to the treasury building.

When this building was ordered burned, the soldiers surrendered with seventeen rifles and two field pieces. This was the nucleus of the insurrection.

It is now of interest to determine which organizations of the United States Army were closest on Aguinaldo's trail at different times, and it must be borne in mind that all the forces

in Northern Luzon were strenuously working to capture him. Even the private soldier could feel the weight of the Field Marshal's baton in his haversack, which might be of use to him should he succeed in accomplishing this feat.

From a comparison of Señor Villa's diary and the tabulated summary of the principal events connected with military operations in the Philippine Islands—November 13, 1899, to March 24, 1901—contained in the report of the Lieutenant-General commanding the Army, these facts are arrived at. Some detachments, not mentioned, may have been equally close, but, having had no brush with the insurgents, their proximity to Aguinaldo is not of record.

"November, 1899.—Troops D and K, 3d Cavalry, strike a battalion of 300 insurgents near Manaoag.

"November 15.—A battalion of the 33d Infantry, U. S. V., capture Aguinaldo's mother and son at San Fabian.

"May 19, 1900.—Major March, commanding 100 men of the 33d Infantry, U. S. V., strikes Aguinaldo's rear-guard near Sagad, P. I., and kills three insurgents and captures two, secures five rifles and four ponies and wounds a mounted officer, whose horse is captured. The saddle-bags on horse contain Aguinaldo's papers since November 1, 1899."

Señor Villa in his diary gives the following account of this engagement:

"About 4.30 P. M., Señor Villa, who had remained in the settlement of Asibanban with the troops, received a report from Lieutenant Alegandrino saying that the Americans were moving on our camp in skirmish formation, 200 yards distant. Señor Villa ordered everybody to march, and he rushed forward in search of the Honorable President, not knowing where he was at the present moment. Villa went up to the top of the mountain ridge where he thought the Honorable President was and found him there and informed him of the presence of the enemy. Behind Villa came the soldiers. Scarcely ten minutes passed before the enemy opened up on us with their volleys. Our rear-guard returned the fire. The Honorable President and his cavalry escort retired ahead of us, but the bullets of the enemy traversed the whole length of our column. In this fight our casualties were, 2d Lieutenant Morales killed, two soldiers wounded, and Lieutenant Valentine and some soldiers missing. We had to abandon our horses.

"November 23.—Detachment of 16th Infantry was fired on from cliffs each side of Carreterretegan river (near Palanan). Enemy dispersed. Lieutenant Hagedorn slightly injured by gravel thrown up by ricocheted bullet.

"March 23, 1901.—General Funston with four officers and eighty Macabebe scouts and three ex-insurgent officers embarked on gunboat *Vicksburg*, Commander Barry, U. S. Navy, commanding, left Manila 6th instant; landed at 1 A. M., at a point in Casiguran Bay, on the 15th, and then marched ninety miles over rough trails

to the town of Palanan, Aguinaldo's headquarters, which they reached on the 23d. The party, mistaken by Aguinaldo for reinforcements, were received. At a given signal the Macabebes charged the insurgents' quarters and killed two soldiers; captured Aguinaldo, Colonel Villa Barcelona, wounded Major Alhambra, who jumped from the window into the Palanan river and escaped or drowned. One Macabebe slightly wounded. Party marched toward the sea and boarded the *Vicksburg* on the 25th, reaching Manila at 3 A. M., March 28th."

The sufferings endured by Aguinaldo and his party have been vividly described by Señor Villa in his diary. It only now remains to say a few words concerning the hardships of the pursuing American forces, and it is concluded that the experience of one column was about the same as that of another; for which reason, and because of a better acquaintance on the part of the writer, the expedition of the detachment of the 16th Infantry, that engaged Aguinaldo's soldiers near Palanan on November 23, 1900, is selected.

This detachment left Ilagan, in the Cagayan valley, on November 15th, and consisted of three officers, one contract surgeon and forty-eight men. Vague rumors had been prevalent that Aguinaldo was at Palanan with seven hundred men. The movement was in the nature of a reconnoissance. Palanan, located on the Pacific ocean, fifty-seven miles distant, had never before been visited by an American soldier. Two previous attempts had been made to send scouting parties over from the Cagayan valley, but in both instances they turned back on account of the difficulty of the country to be traversed. The whole region beyond Malunu, thirteen miles east of Ilagan, was a *terra incognita* so far as the American soldier was concerned.

Thirty natives were secured, as packers, to transport, on their backs, the ten days' rations and four days' emergency rations with which the command was provided, as it was known that no pack animals could pass over the trails. This supply seemed ample to the distance to be covered.

One or two of the natives claimed to know the trail, but there was usually an animated discussion at any point where a game trail crossed the one on which this detachment traveled. Fortunately the rivers were low, it being the dry season, and where they could not be forded by holding hands and thus sustaining each other, a rope was attached to a tree on the bank and one of the natives swam to the other side and made it

fast. In this manner little difficulty was experienced in crossing the command.

The march was confined, in a great degree, to the beds of rivers unless it became necessary to cross mountains. An idea may be formed of the difficulty of the country when it is noted that the average march was five miles a day. It takes something in the way of impediment to make an American soldier stop at the end of five miles.

The packers with this column had to be continually guarded in order to prevent their escape with the food they carried; this in addition to the usual out-post duty at night. The country offered nothing in the way of food.

After two minor engagements with the insurgents in the neighborhood of Palanan, that town was reached on November 25th. Not a man, woman or child was found in the town or the adjacent ranches. Everything, even the flooring in a number of the houses, had been removed to the mountains. This command lived, for the three days it remained to scout the country surrounding Palanan on boiled, green pappea and the meat of five goats that evidently escaped from their owners during the exodus; the four days' emergency rations were reserved for the trip back over the mountains.

On November 28th, the return trip to Ilagan was commenced. The men's feet were extremely sore, and to add to the perplexity of the situation, it now rained daily and the rivers that were waded on the advance were becoming swollen torrents necessitating a climb of hours to avoid a crossing. The men were, at times, greatly annoyed by the mountain leeches, or "limatics," as the natives call them. These leeches would perforate the clothing, fill themselves full of blood and drop off in the underclothing. The aperture which they had made in the skin was not closed, and consequently when camp was reached the men would strip to bathe and find that their socks were saturated with blood. The bite of the leech is not especially painful, but a man becomes very parsimonious of his blood when he lives on one-half of an emergency ration. These insects even continue their operations at night. Aguinaldo told the writer that four of his men were made deaf by them crawling in their ears at night and perforating the eardrum.

Ilagan was reached on December 7th, one soldier of the

command having been drowned and another captured by the Igorrotes and killed.

To summarize, it appears:

First.—That the capture of the head of an insurrection is an important factor in its suppression, this especially so when dealing with the Malay race.

Second.—That although the pursuer is often in dire straits, the pursued is usually in worse.

Third.—That an efficient secret service, in time of war or rebellion, is invaluable.



AN IGORROTE.

THE NEW NATIONAL GUARD.

BY COL. JAMES M. RICE (LATE) N. G. ILLINOIS.



HE National Guard of the United States now consists of about one hundred and twenty thousand volunteers, enthusiastically loyal and patriotic, and as good material for soldiers as was ever found in any army; and with a short period of actual military service in the field it would develop into a very efficient army. The late Spanish War demonstrated its value and revealed some defects in its equipment and organization and in the method of getting into the service.

The public interest in it has been increased by the passage of the late act of Congress,¹ which is quite a step in advance of any previous law.

The aim of the law is to make a good soldier without spoiling a good citizen or causing an injury directly or indirectly to the civil government. The Constitutional relationship of the National Guard to the State and Federal governments is an important and delicate matter and should be first considered, for it is by virtue of the power conferred and wisely and carefully guarded by the Constitution that Congress is enabled to legislate on the subject.

Some difference of opinion has been expressed as to whether or not the militia while in the national service can be constitutionally and legally used outside the boundary of the United States. This doubt should be forever removed from the minds of all, and the law amended so that the President's power to use the National Guard, and the National Guard's right as well as duty to serve wherever needed, whether within the territory of the United States or in a foreign country, should be affirmatively recognized and stated and placed beyond cavil.

This amendment is made necessary because every man ought to be clearly informed by statute before he enters the National Guard just what service may be required of him, in order that he may enter with that service in view; and the President should be plainly assured by Congress of his power

1. U. S. Statutes at Large, 1901-1903, chapter 196, page 775.

and duty to use the National Guard wherever needed, so that he would do it without hesitation.

At a former time, when the so-called militia included all male citizens of proper age, no matter how unwilling they might be, there was an effort made on their part to limit their sphere of action and render the militia law as nearly as possible a dead letter, and every means and excuse were adopted for these purposes. Among other things this Constitutional question was raised. Especially was this done in the war of 1812, when the administration was seeking to carry on a war so unpopular that a large minority of Congress published a vigorous protest against it and a number of States were in open rebellion, when but few enlistments for either the volunteer or regular army could be obtained by appeals to national pride or offers of bounty, and the Secretary of War himself proposed a law allowing the Government to enlist minors without consent of their parents or guardians, and Congress refused to authorize the army to be filled by conscription or draft.²

There is nothing in the Constitution that in any way limits the place where the National Guard in the service of the United States may be used. The only limitation is as to what occasions shall justify the President in calling it out. When once in the service of the United States it is subject to the same Constitutional provisions as the regular army and volunteers in every particular, except as to the appointment of its officers.³

Professor Ordreux is cited as authority to the contrary; but his argument that the militia cannot be used outside the United States breaks down completely in two places. It is based upon that section of the Constitution which gives Congress authority "to provide for calling forth the militia to execute the laws of the Union, suppress insurrection and repel invasions." The Professor says that in the history of this provision there is nothing indicating that it was ever contemplated that such troops should be employed outside the boundary of the United States. This is his first error and it is a very important one. When the Constitution was first

2. Patton's History of the U. S., pages 584, 588 and 590: Von Holt's Constitutional History U. S., Vol. 1, pages 235, 237, 253, 257 and 258: McMaster's History of the People of the U. S., Vol. 4, pages 11-17, 243: Niles' Register, vol. 2, pages 309-315.

3. Constitution of the U. S., art. 1, sec. 8, par. 15: Rev. Stat. U. S., Sec. 1342: Flemming vs. Page, 9 Howard 603, 614, 615: Story of the Constitution, sec. 1201, 1206: Winthrop Military Law, vol. 1, 84, 102: Cooley's Principle Constitutional Law, 89: 4 Elliott's Debates, 459.

drafted this clause included after the word "Union" the words, "enforce treaties," so that it read, "to call forth the aid of the militia to execute the laws of the Union, *enforce treaties*, suppress insurrections and repel invasions," manifestly intending to include every purpose for which military force could properly be used. This clause was retained in this form until the Constitution was almost completed, and until after treaties had been made the supreme law of the land, by the second clause of the first section of article six. Then, upon the motion of Gouverneur Morris the words "enforce treaties" were stricken out, as being superfluous, since *treaties* were to be *laws*, which was agreed to "*nem. con.*"⁴ to use the quaint words of the record. This bit of history plainly shows that the Convention expressly intended the word "laws" to be construed to include "treaties," in this clause in particular, and that it was unanimously intended that the organized militia should be used to enforce treaties. This, of course, cannot be done by staying at home.

NECESSITY FOR SERVICE ON FOREIGN SOIL.

Professor Ordronaux's argument breaks down in the second place where he contends that as the militia are intended to repel invasions, *therefore* they must remain in this country. This conclusion by no means follows that premise. The defender always places himself between the thing defended and the aggressor. Military men, the men "skilled in the art" of defense, say that if the militia cannot go beyond our borders it is disqualified for our defense. To repel invasion successfully, the invader must be met beyond our lines, not after the invasion is already completed; and when he is overcome he must be followed beyond them and demolished. The Professor's unstated major premise is one of military strategy, in which he does not pretend to be an expert. It is that "to defend our borders we should stay this side of them," whereas the best way is usually to go beyond them. With the mistake in his major premise the Professor's conclusion falls, and with it goes the argument of all who have maintained the doctrine that the National Guard in the service of the United States cannot be constitutionally and legally used beyond our borders.

The substance of the arguments of those who oppose the

4. Elliott's Debates in the Federal Convention, 130, 379, 467.

most efficient and unrestricted use of the National Guard may be reduced to two directly contradictory propositions, as follows:

The National Guard is intended to repel invasions; therefore it must remain at home.

The National Guard is unfit to repel invasions, because it must remain at home.

Not only do the Professor's arguments fail, but the authorities cited by him do not support his proposition;⁵ and yet this erroneous idea of Constitutional principles seems to have influenced to some extent the form of the present law.

Mr. Rawle, who wrote the first commentaries on the Constitution of the United States, and who was practicing law in Philadelphia at the time the Constitution Convention met there, and who was United States District Attorney under President Washington, held that the militia, when in the service of the United States, may be used beyond our boundaries.

The committees of both houses of Congress⁶ came to the same conclusion in 1896, and in a bill which was pending in each house inserted the words "and shall serve wherever ordered, within or without the territory of the United States,"⁷ to show where the militia were to serve, and it was done by a unanimous vote in both committees.

This clause was retained up to the time of the outbreak of the Spanish War; and when the war suddenly occurred, and there was no time for militia legislation, this important point was provided for in the Declaration of War itself, which in the second clause demanded that the government of Spain *at once withdraw its land and naval forces from Cuba and Cuban waters*, and in the third provided that "the President of the United States be, and hereby is, directed and empowered to use the entire land and naval forces of the United States, and to call into actual service of the United States the *militia of the several States* to such an extent as may be necessary to *carry these resolutions into effect*."⁸

5. *Ordreux Const. Law*, 501, 506; *Martin vs. Mott*, 12 Wheaton 19; *Houston vs. Moore*, 5 id. 1; *Hildreth's Hist. U. S.*, vol. 3, page 358.

6. Senate Bill 2449, April 14, 1896 and June 2, 1896, sec. 13; Senate Bill 392, March 16, 1897, sec. 13. *Journal Military Service Institution*, November, 1894, page 1217.

7. These words should be added to sec. 5 of the present statutes.

8. *United States Statutes at Large*, 1897-1899, page 738-9, April 20, 1898, id. chapter 189, page 364, April 25, 1898.

It is apparent that there is no restriction as to the place of service of the National Guard, either in the Constitution or in the former statutes of the United States.⁹ While in some cases and by way of *obiter dicta* the flimsy excuses of the old-fashioned compulsory militia that it could not do service outside of the United States have been quoted as law in discussing other subjects, this question has never been raised for decision or been argued before any State or Federal Court.¹⁰

It should always be borne in mind that these adverse criticisms have been directed only against the old-fashioned militia, which as a rule was nothing more than a sudden and forced levy, call or draft of the undrilled, undisciplined, unequipped and unwilling *levee en masse* for temporary service near home.

The sentiment of the people and of the courts is very different toward the voluntary, well-organized National Guard both as to its efficiency and as to the field of its possible service. As it becomes better known and its equipment and discipline are improved, it will merit and receive yet more fully the confidence of the people as a splendid military force, fit for any service in any country. The eight National Guard regiments of Illinois did service as volunteers in the Spanish War. Four served in Cuba and Porto Rico and the other four tried their best to get an opportunity to do so. They are all still in the State service.

Our statute should not require the President to say to his military forces in the field that they must not attack the enemy until he is fully ready and shows it by passing our frontiers, and that if he is worsted they must not demolish him by following him up in his retreat, but must give him a chance to reorganize behind the boundary line, while on the other hand the enemy would not hesitate to cross our boundary whenever circumstances were such that an immediate action would be to his advantage. That would make a boundary

9. Rawle on Const., 160: Journal of Military Service Institution, September, 1894, 933: Tucker's Blackstone Appendix, vol. 1, 274: Key's Amendment, Annals of Congress, Part 1, A.D. 1811-12, p. 793: Henry Clay (speaker of the House), id. 743-745: Journal of Military Service Institution, March, 1896, pages 301-305, 313-317: id. November, 1896, pages 453-458: Dunn vs. People, 94 Ill., 139-140: Ohio Militia and the W. Va. Campaign, by Colonel Carrington of U. S. Army.

10. Ex Parte Coupland, 26 Texas, 401, 402, 427-430: Dissenting opinion in Kneeder vs. Lane, 45 Pa. St. 276: Ordronaux's Constitutional Legislation, 501, 506: Von Holt's Const. Law of U. S., page 170: Pomeroy on Const. sec. 272, 14 Gray 614, 616.

line better than a strong fortress to him, for our forces might possibly surround a fortress and capture it.

To permit the President to use the militia abroad would not compel him to do so. He and his military officers would use their discretion in the emergencies that are liable to arise when a few troops in the right place at the right time are worth more than double their number a few days later. It is sometimes very important at once to relieve an army in distress or take possession of a railroad, a canal or a fortification. For this purpose the National Guard would respond for service in Canada or Mexico or any other country in as little time as it did at Homestead or Wilkes-Barre, train time added.

There is no doubt but what the National Guard with entire unanimity would much prefer, while in the service of the United States, to be sent wherever the fighting is to be soonest and hottest, whether it be at home or abroad. This was seen clearly in the Spanish War and requires no proof.

The National Guard of Illinois has lately been canvassed by United States inspecting officers, and I am informed they are found to be without exception ready and desirous of serving as National Guard in the United States service on home or foreign soil, on a day's notice, whenever needed.

Whether or not this amendment providing for the unrestricted service of the National Guard should be adopted, the words "in any part thereof" should be stricken out of that part of the fourth section of the new law which provides that the President may call forth the militia "to execute the laws of the Union *in any part thereof*." The words "or enforce treaties" might well be inserted in their place, in order to express more plainly the intention of the framers of the Constitution, leaving the act to read, as the Constitution does in effect, that the militia may be used to execute the laws (including treaties) beyond our borders, or wherever the delinquent may be found. The statute ought not to be made more restrictive than the Constitution. This limiting, as far as it has any effect, is only an efficient fortress for our country's enemies, and it should be removed. Why should our soldiers in the field be compelled to fight at such a disadvantage?

REMUSTERING AND MEDICAL EXAMINATION.

Under the old statute the militia could be instantly called into the service of the United States by the President issuing

his call for this purpose, and every officer or man who refused or neglected to obey such a call was subject to a trial by court martial.¹¹

This is the position in which the National Guard desires to be placed. They, of Illinois, at least, consider themselves in that position now, and if they are not, the sooner they are placed in it the better they will like it and the better it will be for them and for the country. A provision of the new law declares that when proper orders have come for an officer or enlisted man already in the military service of the State, to report to a National officer for the United States service, he shall not be considered in that service until he is re-examined and found fit for military duty. This is demoralizing, and will confuse the jurisdiction as to whom and by whom military discipline can be exercised, if at all.¹² Even if the War Department might see fit to waive the medical examination of the militia when called into the National service, the lack of compliance with the statutory examination would defeat the jurisdiction of the court martial. Congress has no power to subject a man not already in the military service to trial by court martial. No one should be permitted to enter the National Guard who is unfit for military duty; but having entered and participated for years in the governmental appropriations, he should not have as an excuse for disobedience of orders that he has not been re-examined by the surgeon since the order was issued.

The true theory is that a man mustered into the National Guard is already in the military service of his country. If the President on the proper occasion issues his requisition or request to a governor, which is the usual and better way, then the transfer of jurisdiction should take place the instant the governor publishes his order detaching the particular organization and commanding it to report to the General designated by the President. Or, if the President issues his orders direct to the militia officers, the transfer of jurisdiction should take place when *his* order is published.

It is ordinarily desirable that all troops should be remustered and inspected from time to time. This might well be done as soon as convenient after the militia enter the National service. At that time it might be well to have them take an

11. *Martin vs. Mott*, 12 Wheaton, p. 19; *Houston vs. Moore*, 5 Wheaton 1.

12. *Mills vs. Martin*, 19 Johnson, pages 7, 20, 23 and 26; May, 1821.

oath to support the Constitution of the United States and to obey their officers. This oath, however, has already been taken, or should have been taken, by every member of the National Guard on his enlistment therein, so that it is not essential or wise to delay military operations for this purpose. At the outbreak of the Spanish War, Acting Judge Advocate Gen. George B. Davis, in response to questions properly submitted to him officially, held that this remustering and new oath of the militia might be omitted.

The regiment with which the writer was best acquainted did service for some time at the outbreak of the Civil War, and acting under the President's direction, assisted in capturing two steamboat loads of arms, then being taken from the arsenal at St. Louis to the South, before they were sworn or mustered into the United States service at all. They were afterward sworn into the National service as militia and later as volunteers, and remained in the service until the end of the war.

It only took 36 hours to get 8000 of the Illinois National Guard into camp, at Springfield, on the President's call in 1898, and it would not have taken half that long if they had not waited for 3000 recruits. Then it took all the way from ten to twenty-three days additional to get the same troops examined and mustered into the United States service. It took Prussia only eleven days from the declaration of war with Austria to kill and wound 40,000 Austrians, capture 20,000 and practically end the war—less than the average time that elapsed between the assembling of the National Guard in Springfield and the time when they were sworn into the United States service. The delay caused by this unnecessary and unwise restriction might some time prevent the President from seizing and holding strategic points in Canada, Mexico or elsewhere, or might cause the entire loss of a besieged army. It tends to lower the standard of the men and the *esprit de corps* of the National Guard, and make them careless in regard to their field equipment by making them feel that they are policemen only and not practical immediate defenders of the nation, and cannot become so until they have been made over. The Guard should be considered by others, as they generally consider themselves, the first contingent of the Volunteer Army, already enlisted, examined, mustered, disciplined and equipped and awaiting orders.

Of course, in such a service they must not be delayed for purpose of recruiting their ranks from the minimum to the maximum, and examining, mustering and equipping their new volunteers. Men who are already in the service, and who are equipped, should be used as they are, just as is done on occasions of riot duty, and the newly enlisted men should be left at home until they pass the medical examination, are mustered and equipped and learn how to shoot, and then they should be forwarded to their regiment in the field where they could drop into their places without confusion.

The National Guard, while serving even on foreign soil as militia, could and generally would re-enter the service of the United States as a body for whatever time the Government thought necessary,¹³ if there were indications that the war would last long enough to make it desirable, and they ought to have the right to do this without losing their status as National Guard, otherwise the National service would tend to destroy the Guard instead of benefiting it, as it should do. This right was secured to the First Vermont in the Spanish War by State statutes,¹⁴ but it should be secured to all the National Guard by National statutes.

13. United States Statutes at Large, 1897-1899, page 362, chapter 187, Sec. 6, April 22, 1898.

14. In re National Guard, 45 Atlantic 1051: Same case 71 Vermont 493.

(TO BE CONTINUED.)



A MAP CARD SYSTEM.

BY FIRST LIEUT. GEORGE VAN HORN MOSELEY, U. S. A.,
FIRST CAVALRY.



WITH the almost constant changing of troops and garrisons in the various departmental and territorial divisions of the Army, especially under the conditions which have existed in the Philippine Islands during the past few years, officers of the different headquarters find themselves daily called upon to learn new names and rosters, and many different schemes have been devised by which the various changes can be noted and kept in such a form as to be convenient for ready reference without sending out into the record office for the desired information or looking for it through the pages of a roster.

One common method has been to place a map of the territory included in the command on a large drawing board of soft wood. The designations of the companies constituting a garrison are then typewritten on slips of paper $\frac{1}{2}$ -inch by 2 inches, and these slips are attached to their proper places on the maps by pins.

This method is unsatisfactory, as only a small amount of the desired information can be put on these slips; they cover up much of the map, and in this tropical country, where all windows are open, the slips are often blown off the map.

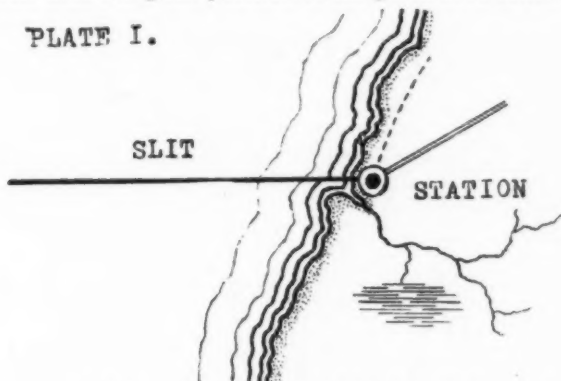
Another method is by marking the stations on a map and having the desired information on cards within reach of the map. This is a convenient way, but there is a delay in finding the proper card and associating it in the mind with the station to which it belongs.

The map card system, to be here described, has been put in operation in a modified form by the writer in two instances, and has proved itself a ready and satisfactory way of keeping the important data of a command. It resembles in some respects the card system of a record room.

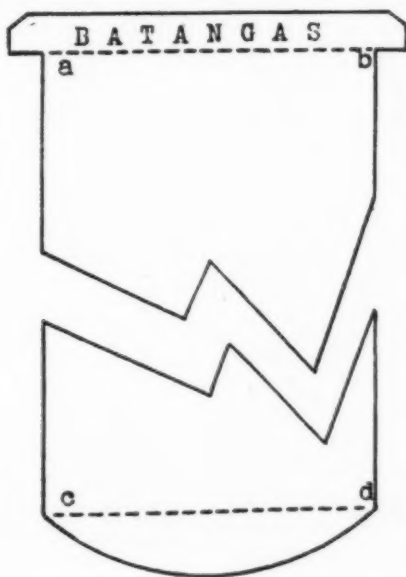
A map of the territory included within the command, on a large scale, is pasted along its edges to a smooth drawing board or smooth wall. The material on which the map is printed should be strong, not easily torn, and preferably with cloth backing.

A horizontal slit, two inches long, is then cut in the map at each station. This slit should be so placed as to least interfere with the data on the map. Thus, in the stations of the Philippine Islands which are often coast towns, the slit would be made entirely in the bay or sea, one end of the slit being at the circle indicating the position of the garrisoned town.

PLATE I.



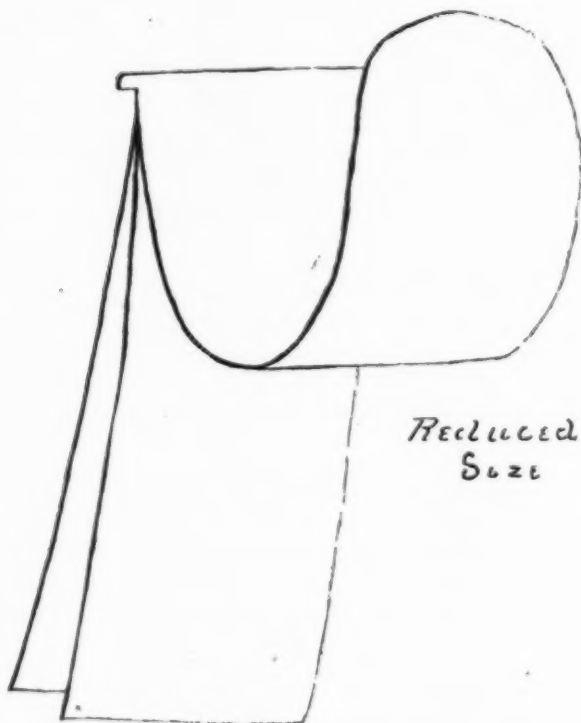
The top of the card to be inserted in this slit has a shoulder as follows:



This shoulder, upon which the name of the station is typewritten, is bent forward along the dotted line *a-b*. It can then be readily taken hold of and withdrawn.

All important data concerning a post can be typewritten on the face and back of the card and on "additional" pasted to it as indicated in Plate III.

PLATE III.



The "additional cards" are rectangular and equal to A, B, C and D. The lower end of the face card is rounded or pointed to facilitate returning it in the slit. The shoulder of the face cards are yellow for cavalry, red for artillery, and white for infantry. When two or more arms are stationed at the same post the shoulder of the face card is divided in color.

Each station card should have typewritten on it the following information:

Garrison, as Headquarters, Band, Cos. A, B, C and D,
 31st Infantry.
 Colonel. Commanding.
 Staff:

 Company A:
 Captain.
 1st Lieutenant.
 2d Lieutenant.
 (Same for other companies.)
 Land Transportation:
 Escort wagons. Mules, draft.
 Spring wagons. Mules, pack.
 Dougherty wagons. Horses, draft.
 Red Cross am. Horses, riding.
 Water Transportation:
 Launches. Row boats.
 Lighters. Tentage.
 Forage:
 Supplied to.

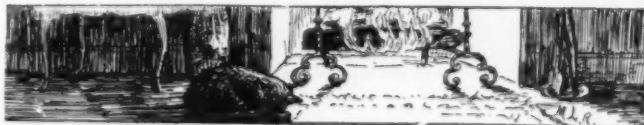
If the map is very large it should be arranged to slide up and down, being weighted and balanced in a manner similar to a sliding target.

An officer can go to a map so arranged and have the entire situation before him. He can quickly and intelligently give directions for the transfer of troops from one station to another, or arrange a movement affecting several stations. All the information that he will need will be either on the card or map.

When there are many changes in a garrison an entirely new card should be made out; the old one should be given a date when the garrison and this card agreed. It can then be filed for future reference.

BATANGAS, BATANGAS PROVINCE, P. I.

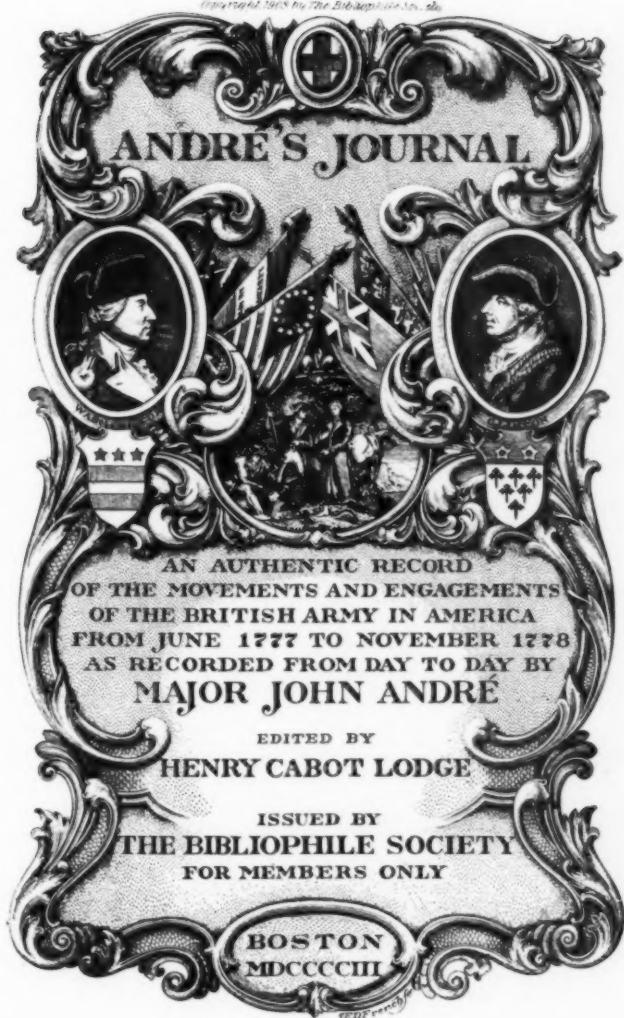
September 29, 1903.





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Memorandum.

*The Editor of the JOURNAL OF THE
MILITARY SERVICE INSTITUTION
desires, on behalf of the Institution, to
acknowledge its obligation to THE
BIBLIOPHILE SOCIETY of Boston
(extended through the courtesy of Mr. H.
H. Harper, Treasurer), for the exclusive
privilege of reprinting some extracts and
of reproducing some of the illustrations
from this unique contribution to the history
of the American Revolution.*

DESCRIPTION.

It is the autograph manuscript Journal of Captain John André, from June, 1777, to November 23, 1778, the approximate date of General Grey's sailing for England, with additions—assumed to have been subsequently written up by André himself in chronological sequence, in his regular and beautiful calligraphy, and the numerous plans and maps, also made by him, inserted.

As a voucher for the handwriting of André (the volume itself not containing his signature), a photograph of the letter in three sheets, 4to, which he addressed to General Washington the day before his execution is placed with the Journal. The photograph was obtained by Earl Grey from America, where the letter is preserved. We append herewith a copy of that letter.

The Journal was recently discovered by Earl Grey, on his opening at his house a box that had not seen daylight for at least 100 years. It is an important MS., and especially interesting to Americans.

The Journal is an oblong 8vo book, $7\frac{1}{2} \times 6$ inches, in limp boards (the number of pages is set forth in the collation), in which have been inserted forty-four maps and plans, wonderfully well drawn and many colored, ranging in size from $6\frac{1}{2} \times 3\frac{1}{2}$ up to $40\frac{1}{2} \times 19\frac{1}{2}$, mostly within ruled borders, folded and fitted to the volume, many with textual explanations.

It opens in June, 1777, the British forces then being under General Sir William Howe, and ends at the close of 1778, the forces then being under General Sir Henry Clinton. André was aide-de-camp to General Grey.

It follows the operations and movements of the British Army within that period, more particularly that part of it in which Major-General Charles Grey acted.

It traces the operations in New Jersey in June, 1777, to the return to New York in July, gives details of the embarkation and distribution on board the fleet for the Chesapeake, the landing at Elk River, the daily marches, movements, and positions; plans and descriptions of the Battle of Brandywine, 11th September; action at Trudusfrin, 19th and 20th September, and of the Battle of Germantown.

A break occurs in the Journal at 30th December, 1777, with the troops going into winter quarters at Philadelphia.

It re-opens in June, 1778, with the operations under General Sir Henry Clinton, upon the evacuation of Philadelphia, with details of the march across the Jerseys, plans and sketches of the positions of the troops from 21st to 28th June, covering the Battle of Monmouth.

After the arrival at New York the last part of the Journal is occupied with the Expedition of General Grey to Bedford Harbor and Fair Haven, on the Accushonet River, New England, in the beginning of September; that up the North River towards the end of September, and General Grey's successful surprise of Washington's Dragoons at Tappan on the 27th of that month.

Major-General Grey and André were exceptionally intimate friends, and hence the preservation of this MS. amongst Earl Grey's papers. It was probably brought home by Grey to show what he had done, and he did not return to America. In 1782 he was appointed Commander-in-chief in America, but the war coming to an end, he never took up the command.

Captain André became Aide-de-camp to General Sir Henry

Clinton, and Clinton's chief confidant. Later he received his Majority and the position of Adjutant-General of the British Forces in America. His fate in 1780 is well known.

INTRODUCTION BY SENATOR LODGE.

The Journal begins on June 11th, 1777, at New York, the British forces then being under the command of Sir William Howe, and André just having joined the staff of Major-General Grey, who had arrived from England on June 3d. The Journal describes first Howe's untimely movement in force into New Jersey, by which he neither drew Washington nor forced him to fight, nor flanked him, nor in any manner got him out of the way. Then comes an account of the return to New York, the embarkation of the troops, their arrival in the Chesapeake, the landing near the head of the Elk, the advance and the victory of the Brandywine. Then follow the march on Philadelphia, the battle of Germantown, and a full account of the hard fighting and severe losses of the British in taking the works at Red Bank and Mud Island, by which they gained control of the river. The futile effort made in December to bring Washington to action, the march out for that purpose and the subsequent retirement to the city are all recounted at length.

With the going into winter quarters on December 30th the entries cease, and are not resumed until June, 1778, when they again begin with the evacuation of Philadelphia, and tell in detail of the retreat to New York and the battle fought on the way at Monmouth. The remainder of the Journal describes the raids of General Grey into New England at New Bedford, Fairhaven, and Martha's Vineyard, and his surprise of Baylor's dragoons in September. With the statement on November 15th that the troops went into winter quarters, the Journal closes.

Accompanying the Journal are forty-four maps and plans showing battle-fields, camps and the position of troops, some of them colored, and all very well drawn.

General Grey returned to England in the autumn of 1778, and apparently took the Journal with him, as it covered the period of his service in America and gave an account of all the operations in which he had been engaged. But however it reached England, it certainly came into and remained in the possession of the Grey family. Then it disappeared from sight and memory, and was only recently again brought to light. In January, 1902, it was purchased from the present Earl Grey, the great-grandson of General Grey, by Mr. W. K. Bixby, of St. Louis, to whose generous kindness The Bibliophile Society is indebted for the opportunity of printing and publishing it.

The Journal is purely military in character. It gives in detail all the movements and positions of the troops, their disposition in the battles, in the transports, and on the march, as well as an account of the regiments engaged. It is entirely free from comment, and the absolute veracity of the writer is clear in every statement. That he may have fallen into errors is quite probable, because in an active campaign it is not possible for an officer on one side to obtain all the facts. At the same time, the purpose of André to state every fact just as it occurred is apparent in every line of the Journal. He not only refrains from comments upon his opponents, but he is singularly free from any attempt to exaggerate the American losses, a very obvious temptation. He never gives way to the practice of de-

scribing in general terms the losses of the enemy as far greater than his own, affording in this manner a curious contrast to the reports of British officers in the Boer War, in which the losses of the Boers reached the most enormous figures and always exceeded those of their opponents. In like manner he does not think it necessary to insist on the British axiom that all persons opposed to them in battle are cowards. He had too much veracity of mind not to see whither this axiom led.

The Journal gives the best version that has yet been given of the British side of the campaign of the Brandywine and Germantown and of the battle of Monmouth. It is especially interesting in regard to the latter engagement, which is one of the most discussed and disputed episodes of the Revolutionary War. André's clear, dry sentences throw much light upon all these operations, from the English side, and cannot fail in this way to be of great value to the military history of that year, and also to the local history of the region of country in which so much of the fighting occurred. The Journal confirms in a curious way the charge which has always been made by the Americans as to the amount of pillaging and violence indulged in by the British and German troops, but it is also shown that the British commanders made the most strenuous efforts and inflicted most severe punishments in order to stop these outrages, something for which American historians have never given them sufficient credit.

We also obtain here a detailed account of the raid into southern Massachusetts, which was of no military importance, but is of interest as exhibiting the pointlessness which characterized so many of the British operations. Indeed the most interesting feature of the Journal, as a whole, is the evidence which it affords of the utter failure of the British commanders to grasp the situation, either from the military or political standpoint. We see very plainly from the Journal how entirely the British failed to realize the futility of their movements, and that, even when they were successful, their victories led to nothing because there was no comprehensive scheme of operations in any one's mind. It is clear that they did not in the least appreciate that they were making no real progress, that while the surrender of Burgoyne was a deadly blow, the victories of the Brandywine and Germantown and the capture of Philadelphia led to nothing. Nowhere is this failure to realize the situation more apparent than in André's accounts of the retreat of the Army to New York from Philadelphia. He speaks of it as a most successful movement, not seeing, apparently, that the mere fact of the retreat to New York and of the abandonment of Philadelphia constituted a serious blow to the British cause. None of them appear ever to have looked beyond the movement or further than the skirmish or battle of the day.

Altogether the Journal, from the military point of view, is one of the most interesting contemporary documents of the Revolutionary War which has come to light in recent times, and deserves the attention of all students of that period.

MAJOR ANDRÉ'S JOURNAL.

JUNE 11th. (1777.) The Commander-in-chief came from Amboy to Brunswick, joining on the road the escort of the provision-train, consisting of the 7th, 26th, and part of the 71st Regiments.

12th. Several Regiments from Amboy and Bonham Town joined the Army at Brunswick, and encamped on the heights above the town and bridges. The Army to take the field was brigaded,—vide Orders.

13th. The Army ordered to march in one column. The First Division under the command of Lieutenant-General Earl Cornwallis, the second under Lieutenant-General De Heister. For the order of march and the General Officers and Brigades assigned to each Division see the Orders of this day.—

Distribution of Corps into Brigades the
12th June, 1777.

1st Brig.	{ 1st Battalion Guards 23d 40th	} Lt. Col. Trelawney
2d Brig.	{ 4th 15th 44th	} Brig. Gen. Agnew
3d Brig.	{ 10th 27th 46th	} Lt. Col. Markham
4th Brig.	{ 17th 38th 64th	} Lt. Col. Mawhood

* * *

From the Orders it appeared that the First Division was to form in column of march on the Princeton Road at 11 o'clock in the evening, but with respect to the Second Division, altho' it was expressed they were to strike tents, no place of rendezvous was appointed, nor were they directed to form in column, tho' the order of march was given. General De Heister had understood he was included in the Order given to the First Division to assemble on the Princeton Road, and proposed bringing up his column in the rear of Lord Cornwallis. General Grey, on the other hand, abiding by the letter of the

Order, thought we were to remain on our ground till further Orders should be received. The Adjutant-General gave the latter explanation to it.

The Second Division struck tents in the evening and lay on their arms.

14th. At daylight Lord Cornwallis's Division having begun to move, a message was sent intimating it had been expected the Second Division would have been already formed in the rear of the first. At 6 o'clock the Second Division, being formed in order of march on the Princeton Road, began to move. Lord Cornwallis, having exchanged a few shots with a flying party of the Rebels at ye Millstone (Hillsborough or Somerset Court House), repaired the Bridge which they had begun breaking down, and crossing the river huttet on the heights of the Western bank. The Second Division huttet at Middlebush, six miles from Brunswick and two from the Millstone.

15th. We changed the dispositions of the troops at Middlebush.

Distribution of the part of the Army not moving with the main body.

Rhode Island	}	Hessian	}	Major-General ¹ Prescott		
Stirn						
Ditfurth						
Huyne						
Bunow						
22d	}	British	}			
43d						
54th						
York Island	}	British	}	New York		
45th						
63d	}	Hessian	}	Lt. Gen. Knyphausen		
Hereditary Pr.						
Trumbach		Hessian				
Pr. Charles						
Stein						
Block	}	}	Kingsbridge and Inde- pendence			
Weissenbach						
Amboy	}	}	}	Colonel Eybe		
55th British						
Battalion of Anspach Waldeckers						

¹This must have been Robert Prescott, although at that time he appears to have been only a colonel by brevet, and it is not clear why André gives him this high rank which he did not attain until 1781, unless he had it by courtesy as commander of a division.

Brunswick	}	British	}	Brig.-Gen. Matthew
7th				
26th				
35th				
38th				
Guards				
Remains of Raille's Brigade, Hessian				

The piquets were ordered to be relieved in future at day-break,—to have a double piquet at that hour.

Great symptoms of a disposition to plunder being perceived in the Troops, the Commander-in-chief sent a message to General De Heister desiring him to warn the Hessians not to persist in such outrages, as they would be most severely punished. Most of the Brigades received the same injunctions from the Officers commanding them.

16th. Two Serjeants of the Light Dragoons and one trooper were either killed or taken this morning. They were on a patrol. This morning at daybreak we began throwing up three redouts near Headquarters and the provision-train. Twelve hundred with a proportional number of Officers were employed on this duty. The Troops desisted working at the redouts at 11 o'clock at night.

It was reported that the Rebel Army had quitted the heights above Bound Brook.

17th. The women who had followed the Army were sent back to Brunswick. A Serjeant from the Welsh Fusiliers deserted, it was said, in consequence of his wife being sent away.

The Troops retained their same positon; the Enemy seemed to vary theirs. The few tents we saw scattered on the hills appeared every day in different spots.

The Rebel Light Horse were formerly seen hovering about Lord Cornwallis's Camp, and the avenues to both Camps were infested by ambuscades which fired on our patrols and out sentries.

18th. Orders were given for the Second Division to march. Two Hessians were killed this evening and four others wounded on an advanced post from Lord Cornwallis's Camp.

19th. The whole marched in one column at 6 o'clock this morning, the Second Division in front and by the right. The Army arrived at Brunswick before noon, and encamped on the heights around it on either side the Raritan: General Leslie's Brigade extending to Bonham Town.

20th. In the morning the piquet of the Grenadiers was fired upon by about 200 of the Rebels, who came upon them from the wood. Upon a party of Grenadiers marching to support their piquet the Enemy retired; no one was hurt.

General Grey being Major-General of the day, the affair of the plundering a house at the landing came under his notice; he confined a Corporal and three soldiers of the 5th Regiment.

The 17th Dragoons, 35th, 38th and 52d Foot marched to Amboy; the 7th and 26th Regiments took up their ground. The flat boat, carriages and pontoons were sent to Amboy. A great deal of firing was heard towards eight o'clock in the evening in the direction of the Rebel Camp, both of cannon and small arms.

The piquets were ordered to load in consequence of General Grey's reporting that this was always neglected.

21st. General Howe referred the affair of the Soldiers of the 5th Regiment, confined for plundering a house, to a regimental Court-martial. It is worth notice that the Hessians Officer who exclaimed against this depredation confessed the Hessians had been concerned, yet confined none, but complained of the British to General De Heister. A Hessian Subaltern's Guard was next door to the house plundered. Major-General Vaughan proceeded to Amboy, escorted by Koehler's Battalion. About 200 of the Enemy made their appearance at Bonham Town but did not advance upon the Troops there.

22d. Several men deserted last night, four from the 44th, three from the 27th, one from the 23d, and some others from other Corps. At 2 o'clock in the morning the whole Army struck tents, but the Second Division (which was encamped two miles from Brunswick on ye road to Amboy, and therefore waited for the Troops encamped near Brunswick) did not begin to move till 7. At about 5, the Rebels appeared at the Jäger post and a few shots were fired. The Army had scarce begun their march when a body of the Enemy shewed themselves on the heights behind Brunswick and where the Hessian Grenadiers had been encamped. They fired several cannon across the river. The other body, which had marched from Bound Brook on the Northeast of the Raritan and had shewn themselves at the Jäger post, proceeded from thence towards Piscataqua and fell in with the column of march at the place where the Quibbletown Road meets and turns into

the Amboy Road. They attacked the Light Infantry but were immediately driven back; they, however, shifted their position from one thicket to another and hung upon the flanks and rear for some distance. They killed or wounded about twenty of our people and a woman, a Grenadier's wife.

In the front, Brigadier-General Leslie advanced with his Brigade and took post at Short Hills, a mile or two beyond Bonham Town towards Amboy. In consequence of the firing in the rear, the Second Division halted for a little while at Bonham Town, and the baggage was sent forward. The Second Division was again halted near Amboy for nigh two hours by an ill-comprehended or ill-delivered Order. The 4th, 15th, 23d, 27th, 44th, and 64th Regiments and Stirn's Brigade of Hessians crossed from Amboy to Staten Island and encamped at Prince's Bay. General Grey crossed and took up his Quarters at Billops.

23d.—

24th. The Hessian Brigade embarked at Prince's Bay. The 64th Regiment were ordered by General Grey to change their ground.

25th. The Regiments at Amboy received Orders to strike their tents and send them with their baggage to the water's side. Those at Staten Island had Orders to leave theirs standing, and repair by 8 o'clock in the evening to Billops Point. The transports, with the Hessian Brigade on board, went round from Prince's Bay to Amboy. The movement of the Troops at Staten Island was meant to be secret; that of those at Amboy might appear as a preparation to embark or to cross over to Staten Island. The Hessian transports, coming up to Amboy at the same time, might well seem destined to receive Troops on board. At about 10 in the evening the Troops crossed from Staten Island to Amboy. The Army lay on their arms, on the Brunswick and Woodbridge Roads.

26th. Two columns being formed, the Right commanded by Lieutenant-General Lord Cornwallis and the Left by Major-General Vaughan. The Right marched a little before sunrise and took the Woodbridge Road. The Left began moving at sunrise and took the Bonham Town Road.

The Right passing through Woodbridge turned to the left and by a circuit gained the road to Scotch Plain.. On their march they fell in, not far from Woodbridge, with a part of the Rebels, who fled on their approach, leaving, it is said, some killed and wounded.

The Left, proceeding for a few miles on the Bonham Town Road, turned in to the Quibbletown Road, and taking afterwards to the right at Metuchen Meeting House, fell into the Scotch Plain Road and came up with the rear of the Right Column. Colonel Prescott, with the 28th and 35th Regiments and the Hessian Battalion of Loos and Donop, was detached to Bonham Town on the Left Column turning into the Quibbletown Road.

The Army was now in one column. The front soon reached Ash Swamp, where they came up with a considerable body of the Rebels commanded by Lord Sterling, who had taken post on a rising ground, in order (it was supposed) to cover the retreat of about seventy waggons, which they had begun to draw off on the news of our approach, and the hindermost of which were discovered by the head of the Column. They made very little resistance, but dispersed as the Grenadiers of the Guards and a few Companies of Light Infantry advanced upon them. A Troop of Light Dragoons pursued the fugitives and took about thirty prisoners, killing or wounding several more. In this affair Captain Finch of the Guards was mortally wounded. The Enemy left three brass field-pieces on the ground. They were French guns.

From the accounts of deserters Washington's whole Army had left the mountains; the main body were at Quibbletown and Lord Sterling with the advanced Guard at Rahway. Lord Sterling was to watch our motions and they were to press on, upon our beginning to embark..

It was reported that in consequence of this information the plan of our march was, that the Right hand Column should by turning Washington's left get between his Army and the mountains, whilst the left march straight to Quibbletown and attacked him. It seems that upon Lord Sterling being discomfited, the alarm was given and they retired precipitately to the hills. We could see the waggons ascending the mountain, and could judge of the steepness of the ascent by the frequent halts they made. The Army proceeded to Westfield, where they lay on their arms.

27th. At 9 in the morning we marched by the left, bringing with us about sixty prisoners picked up at different places and driving the cattle we met on the road. The spirit of depredation was but too prevalent on these marches. This day, however, it was much restrained in the Second Column

(then in front). We scarcely met a man at home excepting the old and infirm. The Army huddled this night along the banks of Rahway, six miles from Amboy.

28th. The Army marched to Amboy. Several Regiments crossed to Staten Island and a great many horses.

29th. More Troops, horses and artillery crossed to Staten Island. A report was current that Sullivan (a rebel General) was at Rahway with 4000 men.

30th. The remainder of the Army crossed unmolested from Amboy to Staten Island. The Regiments were encamped on different parts of the Island. The 4th, 15th, 23d, 27th, 42d, 44th, and 64th encamped at Prince's Bay under the command of General Grey.

July 1st. Some of the Corps, which had encamped towards the middle of the Island, marched forward to Cole's Ferry. General Grey received Orders to embark the Regiments under his command the next day, excepting the 17th and 42d, which were to march by way of the Rose and Crown to Cole's Ferry.

2d. The transports which were to take in the six Regiments at Prince's Bay having sailed for Cole's Ferry by some misunderstanding the day before, General Grey marched the eight Regiments to that place, where they were encamped near the rest of the Army, which assembled and encamped on the heights above Cole's Ferry this day. Some Provincials were stationed on the Western shore of the island at Elizabeth Town, Point Ferry, New Blazing Star, Old Blazing Star, &c.

8th. Part of the Troops embarked according to ye Orders of the day before.

9th. Remainder of the Troops under orders for embarkation embarked.

10th. General Grey came to New York.

14th. 38th and 35th came from Staten Island and landed at New York. One Battalion of Anspach, that of Koehler, together with the 7th and 26th Regiments came up at the same time in their transports and lay off New York.

17th. Sir William Howe embarked on board the Eagle. Lord Cornwallis and General Grant on board the Isis and General Grey on board the Somerset. The Fleet lay off the Narrows.

19th. A signal was made to prepare for sailing.

20th. The Fleet weighed anchor and the transports moved



Wilmington
Charleston
Hendry

Georgetown
H. L. L.

St. John's

St. John's
St. John's

New Castle

New Castle

New Castle

New Castle

New Castle

The St. John's
past here the St. John's

Wilmington

New Castle

New Castle

New Castle

New Castle

New Castle

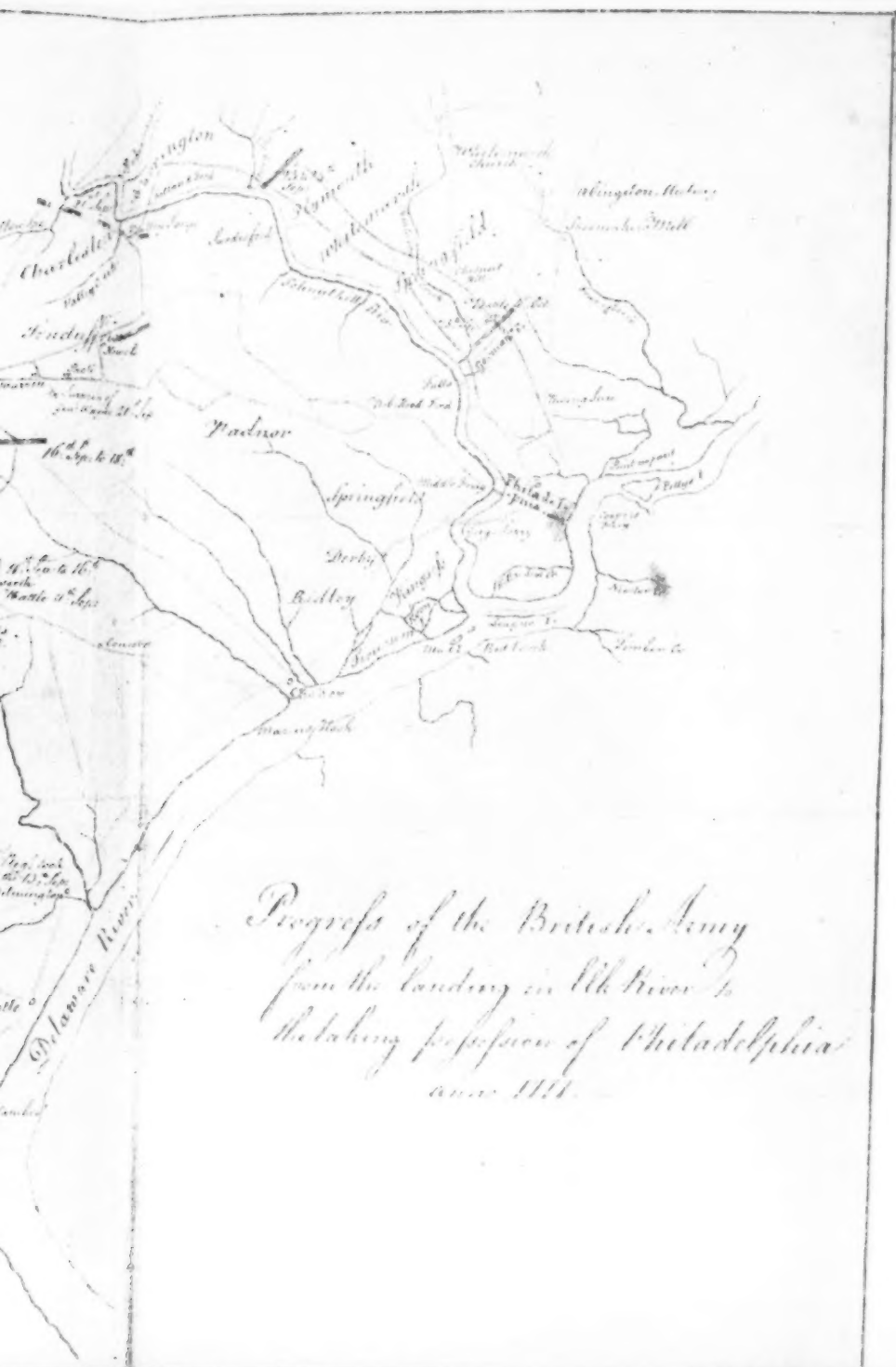
New Castle

Charleston

Charleston

Charleston

Charleston



*Progress of the British Army
from the landing in Elk River to
the taking possession of Philadelphia
anno 1777.*





Progress of the British Army
from the landing in Elk River to
the taking possession of Philadelphia
anno 1777.

down to Sandy Hook Bay. The Men-of-war came to an anchor again near the Narrows.

22d. In the morning the Fleet sailed from Sandy Hook.

* * * * *

(Extract from *Journal* September 20, 1777.)

* * * * *

20th. Intelligence having been received of the situation of General Wayne and his design of attacking our Rear, a plan was concerted for surprising him and the execution entrusted to Major-General Grey. The Troops for this service were the 40th and 55th Regiments under Colonel Musgrave, and the 2d Battalion Light Infantry, the 42d and 44th Regiments under General Grey. General Grey's Detachment marched at 10 o'clock at night, that under Colonel Musgrave at 11. No soldier of either was suffered to load, those who could not draw their pieces took out the flints. We knew nearly the spot where the Rebel Corps lay, but nothing of the disposition of their Camp. It was represented to the men that firing discovered us to the Enemy, hid them from us, killed our friends and produced a confusion favorable to the escape of the Rebels and perhaps productive of disgrace to ourselves. On the other hand, by not firing we knew the foe to be wherever fire appeared and a charge ensured his destruction; that amongst the Enemy those in the rear would direct their fire against whoever fired in front and they would destroy each other. General Grey's Detachment marched by the road leading to White Horse, and took every inhabitant with them as they passed along. About three miles from Camp they turned to the left and proceeded to the Admiral Warren, where, having forced intelligence from a Blacksmith, they came in upon the out sentries, piquet, and Camp of the Rebels. The sentries fired and ran off to the number of four at different intervals. The piquet was surprised and most of them killed in endeavoring to retreat. On approaching the right of the Camp we perceived the line of fires, and the Light Infantry being ordered to form to the front, rushed along the line putting to the bayonet all they came up with, and, overtaking the main herd of the fugitives, stabbed great numbers and pressed on their rear till it was thought prudent to order them to desist. Near 200 must have been killed, and a great number wounded. Seventy-one Prisoners were brought off, forty of them badly

wounded were left at different houses on the road. A Major, a Captain, and two Lieutenants were amongst the prisoners. We lost Captain Wolfe killed and one or two private men; four or five were wounded, one an Officer, Lieut. Hunter, of the 52d Light Company. It was about 1 o'clock in the morning when the attack was made and the Rebels were then assembling to move towards us, with the design of attacking our baggage.

Colonel Musgrave marched a different way and took post on the Philadelphia Road at the Paoli. It was thought he would have first fallen in with their outposts. By our attacking them on the flank next to Colonel Musgrave's Post, they retired the opposite way and his Detachment saw nothing of them.

A second Brigade had joined Major Wayne the evening before and 1500 Militia under Smallwood lay at the White Horse.

We took eight waggons and teams with flour, biscuit and baggage; their guns we could not overtake. The Detachment returned to Camp by daybreak by the Paoli and the road Colonel Musgrave had marched.

* * * * *



ANDRÉ'S LAST HOURS.

PREFATORY

Americans, although recognizing both the necessity and the justice of André's sentence, have never felt toward André himself anything but profound pity together with admiration for his gallant bearing and high courage in his last hours. In printing this Journal, however, it seems not amiss to reprint one of his own letters, as well as certain opinions of the American officers who were brought in contact with him during the closing scenes of his life.

It was not the intention of André to approach within the American lines; he was ordered by his commander to meet Major-General Arnold upon neutral ground, but in the night was led past the sentry into the enemy's camp. While there he committed the fatal indiscretion of changing his uniform and accepting papers from Arnold. Hence, Washington was moved to say of him: "He was more unfortunate than criminal."

Hamilton said that upon the occasion of one of his visits to the prisoner shortly before the execution, "He begged me to be the bearer of a request to General Washington for permission to send an open letter to Sir Henry Clinton. 'I foresee my fate,' said he, 'and though I pretend not to play the hero, or to be indifferent about life, yet I am reconciled to whatever may happen, conscious that misfortune, not guilt, will have brought it upon me. There is only one thing that disturbs my tranquility: Sir Henry Clinton has been too good to me; he has been lavish of his kindness. I am bound to him by too many obligations, and love him too well, to bear the thought that he should reproach himself, or that others should reproach him, on a supposition that I had conceived myself bound by his instructions to run the risk I did. I would not for the world leave a sting that would embitter his future days.' He could scarce finish the sentence, bursting into tears in spite of his efforts to suppress them, and with difficulty collected himself enough afterwards to add, 'I wish to be permitted to assure him I did not act under his impression, but submitted to a necessity imposed upon me, as contrary to my own inclination as to his orders.'"

The request was readily granted, and the following letter was written by André, two days before his execution, to his commander, Sir Henry Clinton:—

Sir,—Your Excellency is doubtless already apprized of the manner in which I was taken, and possibly of the serious light in which my conduct is considered, and the rigorous determination that is impending.

Under these circumstances, I have obtained General Washington's permission to send you this letter; the object of which is to remove from your breast any suspicion that I could imagine I was bound by your Excellency's orders to expose myself to what has happened.

The events of coming within an enemy's posts, and of changing my dress, which led me to my present situation, were contrary to my own intentions, as they were to your orders; and the circuitous route, which I took to return, was imposed (perhaps unavoidably) without alternative upon me.

I am perfectly tranquil in mind, and prepared for any fate to which an honest zeal for my King's service may have devoted me.

In addressing myself to your Excellency on this occasion, the force of all my obligations to you, and of the attachment and gratitude I bear you, recurs to me. With all the warmth of my heart, I give you thanks for your Excellency's profuse kindness to me; and I send you the most earnest wishes for your welfare, which a faithful, affectionate, and respectful attendant can frame.

I have a mother and three sisters, to whom the value of my commission would be an object, as the loss of Grenada has much affected their income. It is needless to be more explicit on this subject; I am persuaded of your Excellency's goodness.

I receive the greatest attention from his Excellency General Washington, and from every person under whose charge I happen to be placed. I have the honor to be, with the most respectful attachment,

Your Excellency's most obedient, and most humble servant.

John André, Adjutant-General.

NOTE. The following pathetic appeal, to which no reply was ever made, was written by André to Washington on the day previous to the execution. The fact that no reply was sent is condoned by the statement that Washington, finding it impossible to grant the request, did not wish to wound André's feelings by a positive refusal; preferring to leave to him until the last moment the consoling hope that his wish might possibly be granted. (See fac-simile of original letter on following pages.)

[MAJOR ANDRÉ TO GENERAL WASHINGTON.]

Tapaan, the 1st October, 1780.

Sir,—

Buoy'd above the Terror of Death by the Consciousness of a life devoted to honourable pursuits, and stained with no action that can give me Remorse, I trust the request I make to your Excellency at this serious period, and which is to soften my last moments, will not be rejected.

Sympathy towards a Soldier will surely induce your Excellency and a military Tribunal to adapt the mode of my death to the feelings of a man of honour.

Let me hope, Sir, that if aught in my character impresses you with esteem towards me, if aught in my misfortunes marks me as the victim of policy, and not of resentment, I shall experience the Operation of these Feelings in your Breast by being informed that I am not to die on a Gibbet.

I have the honour to be

Your Excellency's

Most obedient and

most humble Servant,

John André, Adj. Gen.

to the British Army.

EXECUTION OF MAJOR ANDRÉ.

Major André was executed at Tappan, on the 2d of October, 1780. Dr. Thacher, then a surgeon in the Continental Army, and present on the occasion, has given the following account in his journal:—

"Major André is no more among the living. I have just witnessed his exit. It was a tragical scene of the deepest interest. * * * The principal guard-officer, who was constantly in the room with the prisoner, relates that when the hour of execution was announced to him in the morning, he received it without emotion, and, while all present were affected with silent gloom, he retained a firm countenance, with calmness and composure of mind. Observing his servant enter his room in tears, he exclaimed, 'Leave me, until you can show yourself more manly.' His breakfast being sent to him from the table of General Washington, which had been done every day of his confinement, he partook of it as usual, and, having shaved and dressed himself, he placed his hat on the table, and cheerfully said to the guard-officers, 'I am ready at any moment, gentlemen, to wait on you.' The fatal hour having arrived, a large detachment of troops was paraded, and an immense concourse of people assembled.

"Almost all our general and field officers, excepting his Excellency and his staff, were present on horseback. Melancholy and gloom pervaded all ranks, and the scene was awfully affecting. I was so near, during the solemn march to the fatal spot, as to observe every movement, and to participate in every emotion the melancholy scene was calculated to produce. Major André walked from the stone house in which he had been confined between two of our subaltern officers, arm in arm. The eyes of the immense multitude were fixed on him, who, rising superior to the fears of death, appeared as if conscious of the dignified deportment he displayed. He betrayed no want of fortitude, but retained a complacent smile on his countenance, and politely bowed to several gentlemen whom he knew, which was respectfully returned. It was his earnest desire to be shot, as being the mode of death most conformable to the feelings of a military man, and he had indulged the hope that his request (see fac-simile of letter, page 497) would be granted. At the moment, therefore, when suddenly he came in view of the gallows, he involuntarily started backward and made a pause. 'Why this emotion, sir?' said an officer by his side. Instantly recovering his composure, he said, 'I am reconciled to my death, but I detest the mode.' While waiting, and standing near the gallows, I observed some degree of trepidation—placing his foot on a stone and rolling it over, and choking in his throat as if attempting to swallow. So soon, however, as he perceived that things were in readiness, he stepped quickly into the wagon, and at this moment he appeared to shrink; but, instantly elevating his head with firmness, he said, 'It will be but a momentary pang'; and, taking from his pocket two white handkerchiefs the provost marshal with one loosely pinioned his arms and with the other the victim after taking off his hat and stock, bandaged his own eyes with perfect firmness, which melted the hearts and moistened the cheeks not only of his servant, but of the throng of spectators. The rope being appended to the gallows, he slipped the noose over his head and adjusted it to his neck, without the assistance of the awkward executioner. Colonel Scammel now informed him that he had an op-



Torpan Thu 1st October 1788

Sir

Worsh'd above the Terror of
Death & the Consciousness of a life devoted to
honorable pursuits and flamed with no
Action that can give me Remorse, I trust
the Request I make to your Excellency, at

which may even give me remorse, & trust
the request I make to your Excellency at
this serious period and which is to soften
my last moments will not be rejected.
Sympathy towards a soldier will
surely induce your Excellency and

and a military tribunal to adopt the
mode of my death to the feelings of
a man of honor.

Let me hope so, that if ought in my
character impeded you with solemn thoughts,
me, of ought in my misfortune marks

Bury'd above the Terror of
 Death in the consciousness of a life devoted to
 honorable pursuits and stained with no
 action that can give me Remorse, I trust
 the Request I make to your Excellency at
 this serious period and which is to soften
 my last moments will not be rejected.

Sympathy towards a Soldier will
 surely induce your Excellency and

and a military Council to adopt the

and a military command to adopt the
mode of my death to the feelings of
a man of honour.

Let me hope so, that if ought in my
character imparts you with solemn thoughts
me, of ought in my misfortune marks
me as the victim of policy and not
of resentment. I shall experience the
operation of these feelings in your
breast by being informed that I am
not to die on a gallows.

Thank you for the

your Secretary.
Most obedient and
most humble servant

John Wood

to the British House

portunity to speak, if he desired it. He raised the handkerchief from his eyes, and said, 'I pray you to bear me witness that I meet my fate like a brave man.' The wagon being now removed from under him, he was suspended, and instantly expired. It proved indeed 'but a momentary pang.' He was dressed in his royal regimentals and boots. His remains, in the same dress, were placed in an ordinary coffin, and interred at the foot of the gallows; and the spot was consecrated by the tears of thousands.

"Thus died, in the bloom of life, the accomplished Major André, the pride of the royal army, and the valued friend of Sir Henry Clinton."

ANOTHER ACCOUNT.

The following graphic account of the scene is given by a soldier who was present on the occasion:—

"I was at that time an artificer in Colonel Jeduthan Baldwin's regiment, a part of which was stationed within a short distance of the spot where André suffered. One of our men (I believe his name was Armstrong), being one of the oldest and best workmen at his trade in the regiment, was selected to make his coffin, which he performed, and painted black, agreeably to the customs of those times. At this time André was confined in what was called a Dutch Church, a small stone building with only one door, and closely guarded by six sentinels. When the hour appointed for his execution arrived, which I believe was two o'clock P. M., a guard of three hundred men were paraded at the place of his confinement. A kind of procession was formed, by placing a guard in single file on each side of the road. In front were a large number of American officers of high rank, on horseback. These were followed by a wagon containing André's coffin; then a large number of officers on foot, with André in their midst. The procession moved slowly up a moderately rising hill, I should think about a fourth of a mile to the west. On the top was a field without any enclosure. In this was a very high gallows, made by setting up two poles, or crotches, and laying a pole on the top. The wagon that contained the coffin was drawn directly under the gallows. In a short time André stepped into the hind end of the wagon; then on his coffin—took off his hat, and laid it down—then placed his hands upon his hips, and walked very uprightly back and forth, as far as the length of his coffin would permit; at the same time casting his eyes upon the pole over his head, and the whole scenery by which he was surrounded. He was dressed in what I should call a complete British uniform; his coat was of the brightest scarlet, faced or trimmed with the most beautiful green. His underclothes, or vest and breeches, were bright buff, very similar to those worn by military officers in Connecticut at the present day. He had a long and beautiful head of hair, which, agreeable to the fashion, was wound with a black ribbon, and hung down his back. All eyes were upon him; and it is not believed that any officer of the British army, placed in his situation, would have appeared better than this unfortunate man. Not many minutes after he took his stand upon the coffin, the executioner stepped into the wagon, with a halter in his hand, which he attempted to put over the head and around the neck of André; but by a sudden movement of his hand this was prevented. André took off the handkerchief from his neck, unpinned his shirt collar, and deliberately took the end of the halter, put it over his head, and

placed the knot directly under his right ear, and drew it very snugly up to his neck. He then took from his coat pocket a handkerchief and tied it over his eyes. This done, the officer that commanded (his name I have forgotten) spoke in rather a loud voice, and said that his arms must be tied. André at once pulled down the handkerchief he had just tied over his eyes, and drew from his pocket a second one, and gave it to the executioner; and then replaced his handkerchief. His arms were tied just above the elbows, and behind the back. The rope was then made fast to the pole overhead. The wagon was very suddenly drawn from under the gallows, which together with the length of the rope gave him a most tremendous swing back and forth; but in a few minutes he hung entirely still. During the whole transaction, he appeared as little daunted as Mr. John Rogers is said to have been, when he was burnt at the stake; but his countenance was rather pale. He remained hanging, I should think, from twenty to thirty minutes; and during that time the chambers of death were never stiller than the multitude by which he was surrounded. Orders were given to cut the rope, and take him down, without letting him fall. This was done, and his body carefully laid on the ground. Shortly after, the guard was withdrawn, the spectators were permitted to come forward, and view the corpse; but the crowd was so great, that it was some time before I could get an opportunity. When I was able to do this, his coat, vest, and breeches were taken off, and his body laid in the coffin, covered by some underclothes. The top of the coffin was not put on. I viewed the corpse more carefully than I had ever done that of any human being before. His head was very much on one side, in consequence of the manner in which the halter drew upon his neck. His face appeared to be greatly swollen, and very black, much resembling a high degree of mortification. It was, indeed, a shocking sight to behold. There were at this time standing at the foot of the coffin two young men of uncommon short stature, I should think not more than four feet high. Their dress was the most gaudy that I ever beheld. One of them had the clothes just taken from André, hanging on his arm. I took particular pains to learn who they were; and was informed that they were his servants, sent up from New York to take his clothes; but what other business I did not learn.

"I now turned to take a view of the executioner, who was still standing by one of the posts of the gallows. I walked nigh enough to him to have laid my hand upon his shoulder, and looked him directly in the face. He appeared to be about twenty-five years of age, his beard of two or three weeks' growth and his whole face covered with what appeared to me to be blacking taken from the outside of a greasy pot. A more frightful looking being I never beheld; his whole countenance bespoke him to be a fit instrument for the business he had been doing. Wishing to see the closing of the whole business, I remained upon the spot until scarce twenty persons were left, but the coffin was still beside the grave, which had previously been dug. I now returned to my tent, with my mind deeply imbued with the shocking scene I had been called to witness."

Sacred to the Memory
 of
 Major John André
 who raised by his Merit at an early period of Life to the rank of Adjutant
 General of the British Forces in America,
 and employed in an important but hazardous Enterprise
 fell a Sacrifice to his Zeal for his King and Country
 on the 2d of October, A. D., 1780,
 Aged 29.
 Universally beloved and esteemed by the Army in which he served
 and lamented even by his
 FOES,
 His gracious Sovereign, KING GEORGE the Third
 has caused this Monument
 to be erected.¹

Here died, October 2, 1780,
 MAJOR JOHN ANDRÉ, of the British Army,
 who, entering the American lines
 on a secret mission to Benedict Arnold
 for the surrender of West Point,
 was taken prisoner, tried and condemned as a spy.
 His death,
 though according to the stern code of war,
 moved even his enemies to pity;
 and both armies mourned the fate
 of one so young and so brave.
 In 1821, his remains were removed to Westminster Abbey.
 A hundred years after his execution
 this stone was placed above the spot where he lay,
 by a citizen of the States against which he fought,
 not to perpetuate the record of strife,
 but in token of those better feelings
 which have since united two nations,
 one in race, in language and religion,
 With the earnest hope that this friendly union
 will never be broken.²

¹Inscription on tomb in Westminster Abbey.

²Inscription on slab erected at Tappan, marking the place of André execution.



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THE TRANS-SIBERIAN RAILWAY



THE TRANS-SIBERIAN RAILWAY.

(N. Y. Evening Post.)

ANY consideration, tactical or otherwise, of the conditions existing in the theater of war in the far East makes clear Russia's paramount necessity of maintaining uninterrupted travel over the great Trans-Siberian Railway, and Japan's advantage should its troops be able to intercept and terminate it. Russia is dependent upon this pathway to the East now that her adversary has practically gained mastery of the sea, and there are daily dispatches relating the energies of the Russians in forwarding troops and stores to the scene of conflict. The latest reports state that eleven trains a day are being sent eastward and that additional sidings are under construction at various points to expedite transportation. In order to obtain an accurate estimate of the capabilities of the Trans-Siberian Railway and a comprehensive perspective of its methods the *Evening Post* has sought information of Mr. Henry C. Rouse, president of the Missouri, Kansas and Texas Railway the only American railroad official who has crossed Siberia by this important route and viewed it with a professional eye. Mr. Rouse was with Gen. Nelson A. Miles on this occasion, making the journey from Niu-Chwang to Moscow in January, 1903, on their trip around the world. The journey occupied fifteen and one-half days, and the train reached its destination, Moscow, only seven hours late; such a deviation from schedule, Mr. Rouse pointed out, as one generally experiences at this season of the year in the railway service between New York and Chicago. And the time was lost, he added, in Europe, not in Siberia.

Mr. Rouse says he found the road in remarkable good condition, all things considered, and especially good from Lake Baikal westward, but rather unfinished in the eastward reach. As to the capacity of the road to transport troops to Manchuria and the coast, it is Mr. Rouse's opinion that this is limited solely by its ability to transport them across Lake Baikal. This he considers the measure of the road's efficiency in all instances. Not more than three weeks

should be required, he said, to transport a detachment of troops from Russia to any of the termini of the Trans-Siberian. Mr. Rouse laid particular stress upon the fact that his knowledge of the railway was based upon observations made in January, 1903, and that since that time the Russian government had undoubtedly done a great deal to raise the efficiency of the line, especially as the passing of every month brought the inevitable conflict nearer. Mr. Rouse said:

ENGINE BUILT IN PHILADELPHIA.

"We left Pekin on New Year's day, 1903, traveled to Niu-Chwang and then began our long journey on the Trans-Siberian road. We had a special train furnished us by Admiral Alexieff, and were attended by his flag lieutenant and another officer. Across Manchuria to Manchuria station was a ride of 1,100 miles. Our special train which consisted of a baggage car, a subsistence and cooking car, a special observation car, and two ordinary sleeping coaches, was, by the way, drawn by a big ten-wheel engine built in Philadelphia. It was rather an odd sensation to come upon an engine with an American name plate upon it in the Far East. It gave one quite an at-home feeling. The cold was very severe throughout the journey. In Manchuria it reached 30 degrees below zero, and in the stateroom I occupied the thermometer never rose above 45 degrees. Although the road was rough in places, it was, for one new and lightly constructed, generally good, and we had no difficulty in maintaining a speed of twenty-five miles an hour. We stopped only for wood and water, and change of engines.

"With our entrance into the two private cars, also furnished by the Viceroy, attached to the regular train out of Manchuria station, we began our long journey through Siberia towards Lake Baikal, the vulnerable point in the Trans-Siberian Railway system. The efficiency of the entire road depends upon its ability to transport passengers and merchandise across this body of water, a distance of forty miles. At the time we crossed, the work was under way to arrange for the transportation of cars on board the ice-breaking steamer which navigates the lake, so I assume that method is now employed. We made the voyage across the lake in less than four hours, although the temperature was twenty degrees below zero, and the ice very thick. I might say, here, that there is a tradition about the ice on Lake Baikal—that "it freezes from the bottom up"; but, actually, it was about two or three feet thick. Much has been said recently about the impossibility of navigating the lake in winter; as a matter of fact, it was the 7th of January when we crossed.

LAKE SHORE LINE NECESSARY.

"The capacity of the ice-breaker and its tender, as I figure it, is two regiments of soldiers with their impedimenta, and the vessels should readily make two trips daily each way. But, of course, when the lake freezes so solidly that rails have to be laid temporarily on the ice, the efficiency of the service is necessarily greatly impaired. However, after the frozen period and the few days of transition which come when it is not possible either to cross on the ice or utilize the breaker, I see no reason why troops cannot be carried across in great numbers. The difficulty does not lie in transporting them to Lake Baikal nor beyond it. That the Russian Government realizes

this is evident from the fact that a railway around the lake is now in course of construction, involving much tunneling and other heavy work. Such a lake shore line would do much towards bringing the road up to the efficiency of some of our own transcontinental systems.

"To all appearances the road is well located, with good alignment and slight curvature, and moderate grades, save on the Ural Mountain division, where the trains reach an altitude of 3,600 feet, about half that attained by trains crossing the Great Divide of the United States. Sidings have been built at intervals of twelve or fifteen miles along the line. Much has been said of the Trans-Siberian Railway's inefficiency on account of its being a single track line, but the fact is, seemingly, overlooked in this criticism of the Trans-Siberian system, that the great trunk lines of America are mostly single track west of Pittsburg and Cleveland, and that barely 7 per cent. of all the main-line mileage in the United States is double tracked.

A FIVE-FOOT GAUGE.

"The gauge of the road is five feet, whereas standard gauge of other Continental railroads is 4 feet 8½ inches. The five foot gauge is universal in Russia, so no alien rolling stock can be used in the Czar's domain. The Russian Government owns and operates 25,000 miles of railway, including the Trans-Siberian system, and all proprietary lines are constructed with Governmental aid, the Government guaranteeing their bonds. In this way every line in the Empire may be called upon for equipment at any time, so there is always a large amount of rolling stock at the Czar's disposal for use over his Siberian road in addition to what is already allotted to it. There need never be the least apprehension that the Government will not have a sufficient number of cars in which to convey its troops across Siberia, although the rolling stock used in Manchuria a year ago was mostly antiquated equipment from old European lines of railway, dating back to the period of my first trip abroad, a quarter of a century ago, but between Irkutsk and Moscow, the 'wagon-lit train de luxe' affords a service equal to that employed on the best European or American railways.

"The bridges, with the exception of those on the old road in the level country west of Samara, are up to the requirements of the modern American motive power. Some of the track now in use on the greater part of the Trans-Siberian Line, especially on the east end, is still laid with 56-pound rail, which is rapidly being relieved by 65-pound rail. Much of the track is still unballasted, and some of it is not even properly surfaced in Manchuria, where, however, the ties were the worst features of the work, few and far between and many of them round on top, having not more than a 4-inch face, being made by splitting a pine log in two, laying the flat face to the ground, and adzing off the spot to receive the rail, on the round side.

GOOD SCHEDULE TIME KEPT.

"However, we made the journey over the 1,100 miles of unfinished railroad in Manchuria, 3000 miles of uncompleted track in Siberia, and 1500 miles of old road in Russia, now under construction, on schedule time, without delay or accident of any kind, except a detention due to a snowstorm and heavy head of wind the day before reaching Moscow, only seven hours late, or about as much behind time as the trains of some of the railways operating between New York and Chicago this winter.

"The Trans-Siberian road is to-day in about the same condition for actual service as was the Northern Pacific Railroad a few years before I became receiver of it. It was built by methods akin to those by which our great transcontinental road were built.

"Some years ago the Czar called a peace conference, and thus pulled the wool over the eyes of other nations of the earth. He presumably never supposed for one instant that his proposed scheme for universal peace would be accepted by other governments, because while this idea filled the public mind he set about building the greatest military line in the world. He built it to transport troops to the East, manifestly because the road does not, in Siberia, run through a single city or town, but passes all settlements at a distance of two or three miles; obviously not the way in which to locate a commercial line.

"Prince Hilkoﬀ, who spent several years in this country studying our railroads, told me that the Trans-Siberian road was built and is operated, as far as practicable, on the American system. My observations confirm this, and also enable me to see that the Russians are the first of all the nations to adopt the railway, not only as a means of peaceful conquest, but as a powerful weapon against its foes. Thus Russia has been the first of all the great powers to perceive that the railroad is the most important civilizing agent and the chief missionary influence, as well as the most potent factor in the great affairs of the present day, in peace or in war.

"As between Russia and Japan, my sympathies are with Russia, because I also am Caucasian. I have known almost every kind of people. I have lived with the black man, and the red man, the brown man and the yellow man, but I am for the white man and the blue-eyed race."

RECENT OPERATION OF THE ROAD.

General Levaskoff, director of military communications of the general staff, in an interview gives interesting facts about the Russian line of communications. He says:—

"The transport of troops over the Siberian and Manchurian railroads worked without a hitch, except for a six hour stoppage caused by a collision. Men, guns, ammunition, equipment and provisions have gone forward with clockwork regularity. The sketches of scenes along the route appearing in English news papers are ludicrous. The pictures of encounters with Chinese bandits along the line, with broken rails, tangles of telegraph wires, prostrate poles and Cossacks galloping with what look like miniature searchlights all belong to the realms of fancy. I do not know of a single interruption due to Chinese bandits.

"The protection of the line is assured by more practical though perhaps less poetic means than depicted in the illustrated papers. For example, take the case of armored trains. We discussed the subject and decided against them. The conditions did not call for them. The line runs through territory held by our troops. There may be a few robber bands, but there are no Japanese, at least at present. The only things of the kind introduced are armored cabs for the engine drivers, to protect them from stray bullets.

"There will be no difficulty over the impending stoppage of the ice railroad across Lake Baikal. The lake generally is free from ice about the middle of May, but long before that time the ice breakers will have opened a channel and the ferries will be running regularly.

"Now that the ice railroad has accomplished its mission I will tell you the secret of its origin. It never was intended to convey men, but only rolling stock, engines and rails for the Manchurian line. This it successfully accomplished. Its object was twofold—to provide rolling stock at once and to leave the ferries clear for transporting men and munitions when they start running."

General Levaskoff declares the stories of epidemics of typhus and plague among the troops are absolutely baseless. All precautionary measures are taken. Every carriage reaching Chelyabinsk, just across the Urals is disinfected by steam, the men receive hot food twice daily and there is an unlimited supply of boiling water at all stations to enable them to make tea.

A TRAVELER'S STORY OF A SIBERIAN TRIP.

A traveler who has just arrived at St. Petersburg (March 31), from the Far East, making the trip over the Trans-Siberian Railroad, gives interesting details of his journey. He says:—

"I got on the Siberian railway at Sretensk, on the River Shilka, in the Trans-Baikal, and was surprised to hear that passenger traffic was being continued as before the war, a train leaving that town daily for the west. True, the train is not punctual, but still it runs. The usual time occupied by a passenger from Sretensk to Irkutsk is three and a half days. It took me five days, and I consider this excellent.

"I joined the main line at the station of Karimskaja and traveled comfortably down to Tanchoi, on Lake Baikal. At each siding we met trains with soldiers, provisions and stores. No time was wasted. Hardly has the train from the nearest eastern siding had time to stop than all trains that are ready to go eastward have already started. The organization is excellent and everybody is on the alert, doing his duty with loyalty."

This traveler says that Prince Khilkoff has magnificently accomplished the task of transporting the necessary rolling stock across Lake Baikal. Freight cars were pulled across empty by horses. Locomotives were taken apart and sledged over in pieces. In all seventy engines were thus taken over and promptly reassembled on the other side.

From January 29 to February 25 sixty thousand men crossed Lake Baikal, and all their baggage, as well as military stores and provisions, were carried across the lake in sledges by a contract of twelve kopecks per pood from the station at Baikal to Tanchai and five kopecks from Sanchai to the station at Baikal. For officers and private individuals the tariff is two roubles per man; for soldiers, seventy-five kopecks per man. There were employed by the contractor three hundred troikas, three horses each, and three thousand horses.

The traveler quoted met a number of regiments crossing. The lake was cold, but he did not see any great suffering, as has been talked of. Besides, there are eight stopping places where the men can warm themselves and where warm food is served—"halfway houses," where a very fair meal is obtainable for private passengers.

Judging from the huge supplies at Tanchai a very large amount of the transportation has been completed.

"Local residents tell me," continued the traveler, "that Lake Baikal will be available for crossing on the ice till the end of March, by which time two ice breakers, besides a number of large boats with tugs, will be able to attend to the wants of transportation."

"The railway line from Irkutsk to Moscow works exceedingly well. The passenger service is not restricted, and even a 'train de luxe' is running. I did not see so many troop trains on this line as I thought there would be. Evidently the main supply is already at its destination. The line is guarded by patrols, who have their headquarters at the various railway stations. They are kept in training. Men who have been doing guard duty a few days get target shooting practice for the same number of days, so that they will not get stale.

"I have covered 17,078 versts by rail and 3,550 versts in a sledge, from December 26, 1903, to March 11, 1904, in seventy-six days. I started from the capital and have been through Moscow, Irkutsk, Baikal, Harbin, Vladivostock, Habacoosk, Blagovestchensk, near Ockotsky; the sea of Srentinsk, and back to St. Petersburg, first in peace and then in war times, and I have seen nothing but true devotion and loyal love to the Emperor, who may well rejoice in the patriotism of his subjects."

LEASE OF THE RAILWAY.

The correspondent of the *Matin* in the Far East, writing from Kharbin on February 6, says he has been fortunate enough to meet at that place the French explorer M. Chaffanjon, who has given some interesting information. The first question discussed was how it is that the Russians risk so much money in constructions of all kinds on territory of which they are only tenants, even if it be for 99 years. The land for the construction of the railway has only been leased to Russia for that period. According to M. Chaffanjon, who has seen a copy of the treaty, it contains what he calls a master clause, which is curious. After stipulating that the railway company has the right to station along the lines as many troops as necessary for the purpose of protection and surveillance, the treaty contains the following remarkable addition, which does credit to Russian diplomacy: "If at the expiration of 99 years China desires to enter into possession of the line, she must refund to the company all the expenses of construction and maintenance of the line from the first."

The French explorer goes on to say that it is difficult at present to imagine China paying to Russia the milliards representing the expenses carefully registered for the construction and maintenance of this "fantastic and wonderful railway." It may as well be admitted by anticipation that China finds herself caught by this particular stipulation, and that she can never recover possession of the territories leased or sold to the company. The latter punctually pays the stipulated sums. Everything is in order. Russia is at home from one end to the other of the railway, and, if she is proceeding with the lavishness necessary to a landowner who wishes his property to yield a good return, it is for excellent reasons.

A JAPANESE FORECAST.

(*The New York Herald.*)

HOW well planned is the general campaign of the Japanese and how every move of the early days of the war was thought out in advance is demonstrated in an absolute manner by an interview with Colonel Oka, of the Japanese War Office, a strategist of great fame, published in the *Herald* on January 17. In that interview Colonel Oka gave ample warning to the Russians, had

they been wise enough to take advantage of it, concerning the methods the Japanese would pursue.

Nothing less than prophetic do the words of Colonel Oka seem now. But, instead of a prophecy, it is probable that the Japanese colonel was speaking from exact knowledge of his subject. Almost to a day did he foretell the outbreak of hostilities. He announced where his countrymen would land in Corea, and he foretold the first naval battle.

"First of all," said Colonel Oka, "let me express my conviction that there will be no war until the first week of February at the earliest. Operations cannot begin before February 5th, and it will be later in all probability before the first gun is fired.

"The war will probably be very long and very bitter. We think we are justified in assuming that we shall win in the naval campaign. Even many Russians are doubtful as to their superiority on the sea. To win on the sea we regard as one-half the battle. Europeans think that our bad time will come when the struggle develops on land. It will be full of trials and dangers, no doubt, but we feel strong and confident.

"The statement that Japan could only put some two hundred thousand men into the field is idle talk. We have many more, and we shall have the inestimable advantage of fighting within a comparatively short distance not only of our sea bases in Corea, but of Japan.

"An army crawls upon its stomach and half the business of war is connected with transport and supply. Does anybody who knows anything of the frugal living of the Japanese soldier think that in this important respect we shall not be superior to the Russians? To put the matter plainly, we think that Asiatics have a better chance of fighting in Asiatic countries than Europeans, especially when, as in the case of the Japanese, every man has been trained in European methods of fighting."

"And the plan of campaign?" Colonel Oka was asked.

"Look at the map," said Colonel Oka, as he roughly outlined the coast of China, Corea and Japan. "When war breaks out—and it will be Japan's advantage to strike the first blow—you will find our transports with troops hurrying from Japan straightaway to Chemulpo. We have contracted for plenty of vessels, and there is practically an unlimited supply. The transports will get away to Chemulpo in hot haste under the protection of our war ships. During the winter there is little chance of Russia's Eastern squadron leaving Vladivostok to unite with her vessels at Port Arthur, and we think with our strength in the narrow strait between Corea and Japan we could prevent a juncture at all times.

"Anyway, it is our great idea to bring the Russian navy to battle at an early stage, because the land operations depend greatly upon our supremacy at sea. The coasts of Japan we regard as quite impregnable. After landing at Chemulpo we shall probably make a great march direct to Harbin, over five hundred miles, which we regard as the key to the strategic situation. The roads from Chemulpo are fortunately good. South of Chemulpo the roads are abominably bad, and that is the reason we should not send the transports by way of Fusan."

"Where will be the first great fight?"

Colonel Oka took a pencil and indicated the site marked on the map near Chemulpo.

"Many people think," said the colonel, "that Russia will prefer to keep her ships under cover of her guns at Port Arthur. Japan believes, however, that the transports steaming from Chemulpo, and the knowledge that it will be our intention to carry the fight at the outset into the heart of Manchuria, will tempt Admiral Alexieff to action. At any rate, the site off Chemulpo would be his best chance, seeing that his base for repairs and supply is at Port Arthur—little over two hundred miles distant.

"If Russia refuses battle off Chemulpo, perhaps we shall take the offensive and bombard Port Arthur. We are not at all certain that long-range guns are placed at that fortress and high-angle fire would probably ruin the shipping in port. The high-angle fire of the Japanese battleships would reach the Russian battleships in port, probably compelling them to risk a fight.

"Our strength on land would consist in concentration. Russia, on the other hand, with her troops scattered all over Manchuria, with big garrisons at Port Arthur, Dalny, Mukden, Niu-Chwang and Vladivostok, would, we consider suffer by her decentralization. We think that, by a great effort and much self-sacrifice on the part of our troops, the rush on Harbin, with its immense stores of ammunition, forage and tinned goods, would be a success.

"Once in occupation, we should hold the line at the vital point. To the south would be Port Arthur and Dalny, cut off from their lines of communication. Both places would be at the risk of assault by the Japanese navy outside and the Japanese army on the land side. To raise the siege the garrisons would have to come out and fight in the open.

"We think that the campaign at this point will show how well Japan has learned the latest lessons of the science of war. We recognize, I believe, that the introduction of smokeless powder, long-range rifles and machine guns has revolutionized things. The lessons of the Franco-German War, so long the text-book and guide in the military academies, and still taught in some Western countries, are pretty well obsolete nowadays. New strategy is required, and tactics must be adapted accordingly. In these respects we hope to show that Japan has kept well abreast of the times."

NOTES ON NEW EQUIPMENT FOR INFANTRYMEN.

(Translated from *Journal des Sciences Militaires*, by Capt. T. G. Hanson, 19th U. S. Infantry.)

WHAT makes troops superior in war is, it seems, primarily their courage, their ardor, their confidence in themselves and in their officers; in short, it is their *morale*.

It is necessary, however, for physical strength to correspond to moral strength. Let us make courageous spirits, but let these spirits have at their command bodies capable of serving them.

Although animated with the most ardent patriotism, if fatigue overwhelms him, the best soldier is fit only to be put aside. To be willing does not suffice; to be able is everything.

How many times, in maneuvers, have we seen men arrive on the field of operations, worn out, incapable of the least effort. At the command, "Lie down," they would let themselves fall overcome to the ground. Of what good would they have been on a battlefield? What effectiveness, what efficiency could we hope from the

fire of men that have not only not the strength to aim, but have not even the strength to bring their rifles to their shoulders?

And what have these men done to be in a manner unfit for action? Twenty-five, thirty, thirty-five kilometers (twenty-two miles), rather a long march certainly, but one which there is not a tourist, not a hunter that has not accomplished twenty times, and without the hourly halts.

It is, then, not the length of the march that breaks the soldier down; it is the burden that he carries.

To lighten this burden is therefore the problem; a problem of prime importance, on which, in the hour of danger, may depend victory, that is to say, the safety of the country.

For this problem two solutions are presented. The first would be to lighten the load. This solution is so slightly practicable that, on the contrary, the contents of the knapsack are being constantly increased. Within three years it has been still further increased by the foraging-cap, the bag that holds the shoes, the canvas trousers, etc.

The second solution would be to modify the equipment, so that the load could be more easily carried. It is this second solution that we are going to study.

I.

THE KNAPSACK.

Within the last few years different models of knapsacks have been submitted. Some purported to have the shape of the back, others rested on the loins, others were soft, etc.

To begin with, these knapsacks had one grave fault; they were nearly all entirely different from the present knapsack, and their introduction would have been very costly; it would have entailed, perforce, the removal from service of all the knapsacks present in our supply depots, and the manufacture of new knapsacks for our mobilizing strength.

Furthermore, not one of these knapsacks furnished a satisfactory solution. The knapsack resting on the loins occasions a fatigue to that part of the organism from which may result the most serious disorders. The rigid knapsack, conforming to the shape of the back, is more plausible.

The resulting improvement is, however, only apparent. The fact is that the framework alone retains the shape of the back; the interior pack very quickly resumes the convex shape, which it has in the ordinary knapsack.

The soft knapsack is nothing but an alleviation. In fact, our present knapsack is simply a modification of the soft knapsack. The wooden frame, which does not in fact touch the man's back at any point, should not produce a wrong impression; the soft knapsack has been provided with it in order to increase its capacity, and not to roll up into a simple ball. Under pretext of improvement we must not abandon improvements already acquired and go back a century.

There remains the knapsack in two parts: one part carried all the time, the other, containing effects of least utility, carried as often as possible in wagons.

Without entering into details, the difficulty of its use in large armies, on account of the increased baggage, condemns it, even

admitting that the soldier will not rid himself of the second part, without the knowledge of his officers.

Beyond this the problem is a question of equilibrium. When before starting the men are cautioned to raise the knapsack as high as possible, and to fasten it as tight as possible, it is because the load is lighter when carried on top of the shoulders. The equilibrium, however, not being stable, the knapsack slips, and does not remain in position.

What we must find is the way to keep it in stable equilibrium, on top of the shoulders, without having the supporting-straps unduly tightened, impeding the action of the lungs, and paralyzing the muscles of the arms. This is the means proposed by our device.

DISADVANTAGES IN THE CARRYING OF THE PRESENT KNAPSACK.

The principal disadvantages are as follows:

1st—The back of the knapsack is a plane surface, sometimes convex when the knapsack is completely filled. The man's back is a convex surface. As a result, perfect contact between these two surfaces can hardly exist, except on the shoulder-blades. Hence the pressure, per unit of area, sustained by the shoulder-blades, is much greater than what it would be if the knapsack were in contact at all points with the man's back.

2d—The faulty form, assumed by the back of the knapsack, prevents it, furthermore, from taking a position of stable equilibrium on the man's back; it is constantly tending to move about. Now, the knapsack supporting-straps oppose this movement, transmit to the collar-bone and to the chest muscles a violent pressure, often severe enough to cause a sharp pain. It is to avoid this pain that the man, from time to time, gives a thrust with his shoulder which again raises the knapsack.

The knapsack, when placed on the man's back, forms a kind of cushion, impermeable to air. During great heat, therefore, it prevents evaporation of perspiration, softens the skin, causes discomfort, fatigue, pain—all elements of demoralization.

3d—In carrying the present knapsack the man's shoulders are drawn violently backward, while the shoulder-blades are pressed forcibly in the opposite direction. The man being unable to round his back, in order to bring his shoulders forward, experiences great discomfort in firing.

The addition to the present knapsack of the device that we propose has for its object the removal of all these disadvantages.

DESCRIPTION OF THE DEVICE.

Our device is composed essentially:

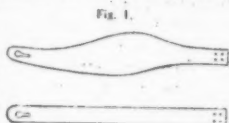
1st—Of an elbowed (angular) steel strip or brace, fixed to the knapsack by small bolts, which go through the knapsack. This angular brace supports, by the aid of lacings, a band, forming, with the upper part of the knapsack, a concave surface capable of coming into perfect contact with the man's back. (Figs. 2 and 3.)

2d—The system of attachment is likewise modified; the knapsack supporting-straps are wider, and their shape is better adapted to the parts of the body upon which they bear. (Fig. 1.)

Their lower extremities come down and are attached to the bottom of the angular brace, which supports the band.

3d—In order to satisfy the imperative necessity of being able

to fire at ease in the prone position (a necessity caused by the new tactics employed against the withering effect of the present artillery), we have completely removed the upper packing of the knapsack, behind the man's head. The shoes, suitably bound together by the coat strap, are no longer fixed on top of the knapsack, but underneath it, by means of the straps at the bottom of the knapsack flap. These straps (slightly lengthened), after fastening the flap, pass close to the heels of the shoes, and are fixed in two small buckles on the lower part of the back of the knapsack.



The canvas bag that formerly enveloped the shoes, now sheltered underneath the knapsack, becomes useless, and its removal effects a saving of 85 centimes, which reduces to almost nothing the cost of the proposed change.

There still remains the mess-tin, especially annoying in prone firing. We had thought at first of putting it into the haversack; although this is not absolutely impossible, it has still appeared to us better to fasten it to the knapsack by means of the extra luggage-strap on the left. Thus placed on top of the knapsack, the mess-tin no longer touches the man's head; the man then experiences no further annoyances in taking the prone position.

It is to be observed that this new disposition of the shoes costs nothing. In fact the straps of the knapsack flap may be lengthened by means of the extra luggage-strap in the middle, the increased length of which has become unnecessary, since it no longer supports the mess-tin. The two buckles needed may be taken from under the knapsack, where they are now useless, since the knapsack supporting-straps are henceforward to be fastened to our device, the steel brace.

Remark.—We had thought at first of covering the steel brace supporting the band on the right side with a leather or cloth sheath, in order to prevent injury to the rifle, when the latter is carried

"slung"; experience has caused us to deem this a useless precaution.

Fig. 2.
modified
Knapsack.



Fig. 3.

Present
Knapsack



The addition of this steel brace to the knapsack increases its weight only by 150 to 200 grammes (7 ounces), after taking into consideration the removal of the canvas bag, so that the knapsack model of 1903, thus modified, weighs even less than the

knapsack in service at present in nearly all the regiments. This advantage is, furthermore, apparent only since, as we shall point out later, the man feels infinitely less fatigue in spite of the increased weight.

Thus it is that a man carries two buckets of water more easily, by adding to their weight, that of two straps and a shoulder-brace.

This change makes the knapsack larger. Not a valid objection, because in transportation, for example, the knapsacks and the braces may perfectly well be received separately, and they need be assembled in the regimental storehouses only.

The loading of the company wagon with knapsacks, thus modified, might appear a little less practical. Nevertheless, by loading them "head to tail," the braces rapidly disappear in the spaces left by the articles of camp equipage opposite the straps, which articles keep the knapsacks themselves at some distance from one another. The same number of knapsacks could doubtless be loaded on the wagons, although such a necessity might not be felt as much. Considering the price of the canvas bag, now become useless, say 85 centimes, this change would call for not more than 30 centimes per knapsack, not to mention the knapsack supporting-straps, the modifications of which (not essential) would take place for knapsacks of new manufacture only; their price, besides, would exceed that of the old straps by about 20 centimes only.

If we take into account the great resulting decrease in fatigue for the man, this price and this increased weight cannot be very serious drawbacks.

It is proper in this connection to observe that the single fact of changing the place of the shoes and fatigue-jacket has increased the weight by 230 grammes (8 ounces), and has cost 85 centimes (weight and price of the canvas bag that envelops the shoes); that the adoption of the aluminium water-bottle (canteen), at present on trial, would entail a cost of two francs per man.

DEMONSTRATION OF THE PART PLAYED BY THE DEVICE.

The location of the knapsack on the back is not immaterial. The higher up it is placed, the lighter it appears to be.

If we consider the knapsack in this elevated position (Fig. 4), we notice that in pivoting on the shoulder-blades it has, in its lower part, slightly receded from the back; but it constantly tends to return to its primitive position, thus forming a lever, and causing this work to be performed by the collar-bones and chest muscles (points of application of the resistance), and by the shoulder-blades, which act as pivots.

If then, by means of the device (Fig. 4), we keep the knapsack in this elevated position, we remove this lever action; the knapsack is then in a position of stable equilibrium, it can no longer move about; the shoulders have no longer to sustain the increased effort created by this movement, and are thus completely relieved. Furthermore, the weight of the knapsack is distributed over a much larger surface, and the pressure sustained per unit of surface is proportionally diminished.

By the suppression of this pivoting of the knapsack on the man's back, we have likewise caused the disappearance of the strain on the organs of respiration. The thoracic wall may indeed be compared with the block that the mason uses as a fulcrum for raising

a stone with his lever; the pressure sustained by the fulcrum (which pressure is very strong when the workman bears down on the arm of the lever) becomes very weak when he ceases to act upon it. The thoracic wall also is no longer compressed when the knapsack, being unable to move about, ceases to act as a lever.

The advantages resulting from the adoption of wider knapsack supporting-straps, of eccentric (non-rectangular) shape, and especially from the change in the position of their lower points of attachment, have likewise a very great importance. The dotted lines of resistance (Fig. 1) show that, on account of their non-rectangular shape, the new supporting-straps act along several lines which spread out on the shoulder, while the old ones act along their median lines only. The compression of the veins and arteries of the arm is thus removed; the straps do not impede the circulation of the blood, and they cause the complete disappearance of the discomfort that the man experienced under the arms.



DIAGRAM OF PRESSURES.

In order to give an idea of the difference in fatigue sustained by the man, according to whether he is carrying the knapsack provided with the device, or unprovided with it, we have constructed a diagram.

In order to obtain it, we have measured, many times, on the march, by means of a special dynamometer, the pressure sustained by the man at the most important points, and we have taken the mean of these pressures for each knapsack and for each particular point. We have then erected on each of these points ordinates proportional to the averages obtained, and we have joined their extremities by a continuous curve; full for the ordinary knapsack, dotted for the knapsack provided with our device.

The diagram obtained is what we represent. (Author does not show this diagram.—T. G. H.)

Its examination shows immediately that with our device the pressure transmitted by the knapsack to the front part of the shoulders and to the collar-bone is diminished one-half; it is diminished in a still greater proportion under the arms and on the shoulder-blades, while it undergoes a considerable increase at the beginning of the lumbar region.

The manner of action of these two knapsacks may also be taken into account. Through the medium of the supporting-straps, the present knapsack acts strongly under the arms. The muscles not having at this part of the body any support for resistance, in a direction opposite to the pressure received, are obliged to sustain passively its whole effect. In the same way the knapsack acts very violently on the shoulder-blades, a bony part of the small area; it is in fact on the point of this bone that we have registered the maximum pressure. From this will be understood the crushing sensation finally experienced by the man, and the need he feels for giving, from time to time, an upward thrust of the shoulder to relieve his pain.

The pressure registered at the beginning of the lumbar region,

like that registered at the forward part of the shoulders (nothing at the beginning of the march), becomes very noticeable at the end.

This difference in pressure is the consequence of the pivoting of the knapsack on the shoulder-blades; this pivoting even increases, in a measure, the pressure sustained by the entire shoulder.

The contour of the broken line shows, on the contrary, that with our device the pressure is uniform.

Moreover, it is diminished in the greatest proportion in the most sensitive parts of the body; on the shoulder-blades and under the arms, where the muscles have no backing to react in a direction contrary to the pressure. It is, on the other hand, increased at the beginning of the lumbar muscles, supported solidly on all sides (in consequence able to react)—better constructed, furthermore, than the shoulder-blades to sustain an increased weight. In addition, the thrust that they withstand is not violent, the pressure being transmitted to them by a wide band, which has only a slight adherence to the man's back, which adherence is easily interrupted by the joltings of the march.

To sum up the fact is shown, by examination of this diagram, that with our device the pressure, already rendered uniform by the position of stable equilibrium of the knapsack on the man's back, is furthermore greatly diminished by the increase in the surface of contact.

ADVANTAGES OF THE DEVICE.

The advantages that the use of our device would produce are established by the preceding study. We limit ourselves to their brief enumeration:

1st—The new shape of the knapsack, by permitting a close contact with the man's back, doubles the area of contact, so that the pressure sustained per unit of area is diminished one-half.

2d—The knapsack's position of stable equilibrium prevents its pivoting on the man's back, and hence, all the resulting useless strain. This position also permits a gentle and uniform action over the whole surface of contact.

3d—The new shape of the supporting-straps, and especially the change in the manner of their attachment, have caused the complete disappearance of the pain experienced under the arms. Furthermore, as they no longer compress the arteries and veins of the arms, it follows that the circulation of the blood is no longer impeded, and that the man is less predisposed to heat exhaustion. The removal of the compression that they produced on the muscles of inspiration of the arms likewise induces normal respiration.

4th—Since the space between the lower part of the knapsack and the man's back permits the circulation of air, all the discomforts coming from the impermeability of the knapsack, pointed out at the beginning of our article, have completely disappeared.

5th—The shoulder-blade being, so to speak, no longer crushed by the knapsack, with the shoulders at the same time drawn violently backward, the discomfort experienced from these conditions in the different movements of the man in firing has disappeared, and the man can fire very comfortably, even in the prone position, in which position he is no longer annoyed by the upper packing of the knapsack.

It is to be observed that all these advantages result more from the attainment of the position of stable equilibrium of the knapsack

on the man's back than from the enlargement of the surface of contact; so that they would almost completely disappear with the disappearance of the equilibrium.

It is this that we ourselves have actually experienced, while alternately carrying both knapsacks, on severe marches, pleasing ourselves by relieving the worn-out soldier, with the simple substitution of our knapsack for his.

What we desire is an appreciation of the prime importance of a modification of the knapsack.

Nobody will contradict us when we say that an average march of 25 to 30 kilometers (16 to 19 miles), which is nothing to a properly shod man, becomes a true torture for the same man equipped with shoes too narrow, too thin or ill fitting, in short with shoes unfit for marching. Nobody will deny that a simple choice of a size larger, for instance, might suffice to make the same man a good marcher. Why? Because everybody marches, while everybody does not carry a knapsack. For the man's back and lungs our knapsack may be compared to the shoes for his feet. The present carrying of the knapsack corresponds to the wearing of improper shoes, as the carrying of the knapsack that we advocate corresponds to the wearing of properly fitting shoes. In the same way that by closely watching the man's footwear the number of lame men may be diminished, so the introduction of our device could restore to us, in part, our disabled men who come in daily wornout and breathless. Let us add, what is not perhaps exaggeration, that the majority of disabled men that are not lame have disabilities produced by the carrying of the knapsack.

Let us reflect upon the grave consequences that may result from the entire organism, when the action of the lungs is impeded daily, during several hours, by the compression of the thoracic wall, and by paralyzing the muscles of inspiration. Let us remember that during the same time the circulation of the blood is retarded by the compression of the circulatory system of the arms, and of its ramifications. Let us imagine the suffering endured by the man, as a result of these faults of equipment: we will no longer hesitate to break off slightly with sacred custom in order to secure the remedy.

Now that all alike serve two years with the colors, the modification of the knapsack is no longer a military question only. It is a question of humanity.

II.

THE EQUIPMENT PROPER.

It is not the knapsack alone that harasses and wearies the soldier; it is also the rest of the equipment.

During great heat, when the column is on the march, the command is given, "Open coats," in order to facilitate breathing. The soldier unfastens his collar and opens one or two buttons. Is he relieved? Can the thoracic wall rise and fall freely? Not at all; its action is still impeded. By what? By the supporting-straps of the canteen and haversack. They bind and compress the thoracic wall, prevent the real opening of the coat, and the relief given to the men by the slight opening of the garment is purely illusory.

The circulation of the blood is of course more free, the carotid artery is released, but, by the turning over of the lapels of the



coats, the thickness of cloth pressing on the chest is doubled, and the thoracic wall is in fact twice as much compressed as before.

What remedy is there for this?

The suppression of the canteen and haversack? It is not to be thought of. What can be done? Attempt to remove the supporting straps. Is this difficult? Not at all, and it is this fact that will be proven by the very simple device that we propose.

It consists (Figs. 6 and 7) in fastening a small copper plate underneath the stud of the hook of each of the three supporting-straps, between the stud and the reverse side of the strap as in Figs. 8 and 9. To the rear plate are attached two straps, the one on the left to support the haversack (from rear), the one on the right to support the canteen (from rear); to each of the plates in front are attached two straps, fastened respectively to the canteen and to the haversack (supporting each from the front).

In order that the supporting shoulder-straps may not be pulled to one side by the weights added to them, two small straps joined together by an S-shaped open hook of copper, and starting from each of the small plates (in front) aforesaid, hold the two supporting shoulder-straps together above the waist-belt plate. (Figs. 10 and 11.) The chest is thus entirely free; the coat may be actually opened down to the fourth button. Canteen and haversack, in marches and maneuvers, remain in place, instead of hampering the man's progress by slipping in front of his legs.

By means of the rear strap the haversack is kept sufficiently to the rear for the man to be able to lie down on his side very rapidly and without any discomfort.

In particular cases, where it is desired to use the canteen and haversack only, use would be made of the present canteen and haversack supporting-straps (crossing in front), which there is no reason to destroy; the surplus, destined for the mobilizing strength, would suffice for the manufacture of straps called for by the proposed

Present.

Modified.

reform. This modified equipment, then, presents no serious objection. It does offer numerous advantages.

To begin with, the thoracic wall is freed from the two cross straps which weighed it down; then let us notice that henceforward the canteen no longer hangs from the left shoulder, as it did formerly, but from the right shoulder; thus the lighter weight is on the side of the rifle, and equilibrium is restored. There is then no reason to fear a depression of one of the shoulders, probable in the case of a number of men, if,

Fig. 10.



Fig. 11.



as has been proposed, the rifle, the haversack and the canteen should be supported on the right side, causing thereby an increase of weight of about 10 kilograms (22 pounds) over the weight on the left side, without considering the discomfort that these two last additions would cause in firing.

Finally, the adjustment of the canteen and haversack will be made in a perfectly uniform manner. The man will no longer be forced to keep pulling at his canteen-strap and haversack-strap, efforts that would cut his shoulder uselessly (since the knapsack would prevent the straps from slipping), and the next moment he would be forced to begin again. On the march or after firing prone the man will no longer be compelled to push back, with his hand, his canteen and haversack to their proper places. His equipment will thus fatigue him less, and will especially annoy him less; he will be more at liberty to make use of his weapons.

CONCLUSION.

We know the immense difficulty with which we are coping when we advocate this new equipment. We are proposing a reform, of easy accomplishment certainly, but still a reform, and every reform, however slight, is feared. Why wish to change what exists? Why not be satisfied with what satisfied our predecessors?

No! We must get out of this torpor; we must reflect that across the Rhine they have twice, thrice within ten years altered the equipment, especially the knapsack; seeking always precisely what we are seeking to-day, to relieve the soldier in such a way as to bring him upon the battlefield fresh and in good condition; proof positive that it is a question of prime importance.

Tranquillity is sweet. Let us not be tranquil, let us make changes, let us not be discouraged; others are also seeking, and they are not discouraged.

Of what importance is our ease, our tranquillity? It is necessary that France, the great sower, erect in the radiant dawn of the new century, shall spread broadcast her divine seed, to be harvested by future generations.

LACOMBE,

Lieutenant, 46th Regiment of Infantry.

ARTILLERY REMOUNTS FROM AN AUSTRALIAN POINT OF VIEW.

BY CAPTAIN B. VINCENT, R.H.A.

(Proceedings Royal Artillery Institution.)

AT the present time, when the question of army remounts is occupying so much of the attention of press and public, some ideas on the subject formed during a recent tour in the Australian colonies may be of some slight interest.

I was fortunate enough to have had exceptional opportunities of seeing something of Australian horse breeding in some of the largest stations in New South Wales, and of talking the matter over with people of every description connected with horses. My experience was that nearly every man one met in train or steamer, both in

Australia or New Zealand, was only too ready to talk about horses, and as a rule knew a good deal about them.

On the voyage from Bombay to Melbourne I had the pleasure of making the acquaintance of three of the principal horse shipping agents of the Indian Government. They all maintained that the class of horse required for artillery wheelers is exceedingly difficult to procure, and that although they have representatives throughout the breeding centers of Australia, yet they find it almost impossible to meet the requirements of the Indian Government in this respect.

The chief reason they said for the scarcity of horses of the artillery stamp is that electric trams have superceded omnibuses and horse trams in Australian towns, and in consequence there is not the same demand for medium draught horses.

This, I subsequently found, to be quite true. When traveling through Australia one sees plenty of big strong horses of the heavy cart-horse type, chiefly got by imported Clydesdale or Puncher stallions out of cross-bred mares, too big and awkward for artillery purposes, or else rather small half-bred animals suitable for riding or for the light buggies of the country.

Even in the coaches, which are still the only mode of conveyance, through thousands of miles of bush, the horses are chiefly light, hardy animals of 14.2 to 15 hands.

In fact one seldom see a horse which fills the eye as an artillery wheeler.

As in the case of breeding polo ponies about a certain height, the ideal gun horse seems to be very difficult to produce. Several men who go in extensively for horse breeding said that they had often experimented with heavy stallions to light mares, and also with thoroughbred stallions to draught mares, but that they could never be sure of getting the happy medium required.

The producers in general said that the Government would never obtain artillery horses in sufficient numbers under the present system of dealing through middlemen or shippers.

All the profit goes to the dealer, who naturally enough endeavors to purchase his horses at the lowest price he can bargain for, and a very low one it is as a rule in Australia.

He takes a certain amount of risk in bringing the horses down country and in shipping them to India, but in these days of well-ventilated steamers built purposely for the trade, and of high insurance, the chance of loss is small.

What the station owners maintain is that they do not receive enough encouragement to produce the type required, as they have no certain market in which they can dispose of their stock. They may part with their animals at a low price to the dealer, but supposing he does not take them, thanks to the advent of electric trams, there is little demand for this class of horse. They therefore only breed enough riding horses for their own requirements and find cattle and sheep more profitable. In a word, there is not enough certainty about it to make it worth while to endeavor to breed gun horses.

Now, from the Government point of view, the difficulty is what better and not dearer means can be adopted to overcome the necessity of dealing through a middleman and whether it is possible to eliminate the latter altogether.

The colonists all agree that it would be hopeless for the Government to compete with the producers by establishing horse breeding in stations in any of the older colonies, *i.e.* Victoria, Queensland, or

New South Wales, though what might be done in the north of West Australia will be considered later.

Most breeders, however, with whom I discussed the question are of the opinion that the Indian or Imperial Government should deal direct with them, by forming one or more depots in New South Wales or Victoria where they could be certain of getting a fair price for any likely young stock of the required type.

Of course the depot would have to be situated in the so-called rainfall area so as to be as free as possible from drought. Then, as was done at the time of the Anglo-Boer War, an Imperial officer with a veterinary surgeon should be sent to various centers, advertising that he is prepared to buy everything suitable, stating the sum the Government is prepared to give for remounts—artillery, cavalry and mounted infantry. In this way, three-year-olds and upward could be bought and forwarded to the depot where they might be partially broken before shipment. It might be left to the officer's discretion to buy likely two-year-olds and even yearlings. The price given would have to be arrived at after allowing for a percentage of loss owing to accidents, shipping casualties, and the ordinary charges.

One great advantage of a depot of this description under an Imperial officer would be that instead of keeping the remount business a close corporation and giving orders for horses to a few particular firms, the Government could buy from anyone who would sell the article required. Hence the competition would be greater, and the mutual pecuniary benefit to both Government and breeder by the elimination of the middleman would be considerable.

Take a case in point as told me by a stock owner: "I offered a buyer 40 head of horses, knowing that a large number of them were not suitable. He took 19, including 1 cavalry remount, 17 artillery and 1 bounder. For these he offered £7 each. I took it because I could not do any better, and if I had kept on for another year, many would have been too old. I knew that for 18 of those horses he would, barring accidents, get £45 a piece in India after paying about £9 a piece shipping charges. If a Government man had been about, he would have given me a tanner a piece and then done good business."

The crux of the whole question is, make it pay to grow the horses of the type required. Create the demand, and the supply will be forthcoming.

Talking one day about horses in general with an eminent West Australian land owner and breeder of horses, who happened to be a fellow passenger between Australia and New Zealand, he said that it was a great pity that the Imperial Government did not take up a large extent of country in the Kimberley district, which could be got for a mere nominal rent. This part of a hitherto unknown country had been recently explored and surveyed by the chief Government surveyor of Western Australia, Mr. S. Brockman, who had reported on certain portions as eminently suitable for breeding horses, about 6,000,000 acres of good grass land along the King Edward river, some 50 miles south of Port Wyndham.

It so happened that another passenger on board, an old pioneer who had spent his life in exploring the back blocks of Australia, had been through this particular district, and described it as follows: "A magnificent limestone country with good grass, in every way suitable for horses, with permanent running water, regular monsoon

rains. The climate wonderfully temperate, dry and healthy, considering the latitude 16° south."

At present there is a fortnightly service from Perth to Port Wyndham, and the latter is said to be a good harbor capable of development. We thought that this huge district which could be got so cheap would be an ideal place in which the Government might try the experiment of breeding remounts on a large scale.

Geographically, it is in a most central position as regards India, South Africa and the Far East. Mares could be obtained from the older colonies, or returned from India. Stallions could be imported from home. They assured me that the initial cost of building a homestead, paddocks and fencing would not amount to more than a few thousand pounds.

A British officer with a few reliable farriers, assisted by one or two stockmen and drivers, would be enough staff to start with. Natives are plentiful in those parts and are splendid horsemen and rough-riders.

Of course as regards breeding, it is hard to get exactly what one wants, even with thoroughbreds and draught stock, and the difficulty is increased a hundredfold when breeding from cross-bred dams, yet in the case of a large establishment as here proposed, it might be possible to get remounts suitable for all military purposes.

In India there are many mares which are cast annually from batteries as the result of accident or chronic lameness due to ring bone in particular. These could be brought back chiefly in horse ships on their return journeys from landing remounts.

Even mares cast for age might be worth bringing back, as the most recent American impregnators are said to be used with great success in the case of old animals which have not been bred from before.

On arrival in Auckland, I wrote to the Premier of Western Australia to ask whether he could favor me with any information about the country in question, and on reaching London, I received a letter as follows through the Agent-General, with a copy of Brockman's report:

"A remount breeding reserve of one million acres was declared in the Kimberley district on the 20th of March, 1902. Sir John Forrest, who was at the time in London, was advised of this reservation and its object in May, 1902. He was at the same time asked to enquire as to the probability of the Imperial Government entertaining the project of establishing a remount depot and breeding establishment in that locality. He accordingly interviewed the Colonial Office and was there informed that the War Office had the matter before them for consideration. Finally, notification was sent to him that nothing was likely to result from the proposal. The Government of India was similarly approached with similar results. Thus the proposal fell through. The land was then thrown open and promptly taken up by several graziers."

Thus it will be seen that the West Australian Government were in favor of utilizing the district for horse breeding and reserved it for some time in the hopes of the Imperial or Indian Government taking it over. Now to get the land, it would be necessary to compete with the graziers, who find it more profitable to breed cattle than horses, and the golden opportunity of getting the land for a nominal rent has gone.

It appears that the Indian Government are just embarking in a

new breeding scheme of their own, so that for the present the idea of an Imperial horse reserve in Western Australia must be indefinitely postponed.

September 1, 1903.

TRANSPORTATION IN WAR.

(The N. Y. Evening Post.)

ONE phase of the Russian-Japanese situation of especial interest to army officers is the question of transportation in the case of hostilities in the Far East. The conduct of military operations with only a single track railroad to connect the seat of war with the main base of supplies thousands of miles away, is unprecedented in warfare, and there is much speculation as to how Russia will handle the situation. [See "Trans-Siberian Railway," page 503.]

The moving of large bodies of troops by rail is so difficult a matter that an officer of high rank who served in the campaign of the allies at Pekin believes that the congestion at the eastern end of the Siberian Railroad will be so great, in case Russia finds it necessary to rush troops and supplies to the front in large quantity, that the authorities will actually find it quicker and more convenient to unload the troops at Lake Baikal and march them overland to the seat of war. The maximum capacity of the Siberian line for continuous and prolonged service has been stated as low as 500 troops a day with supplies, though the best authorities here set a much higher figure than that. The fact that the road has a gauge of its own makes the return of cars from the eastern terminal a most essential part of the problem.

Some of those who have discussed the situation have apparently made the mistake of assuming that Russia would have to keep her army supplied in chief part by means of this railroad line. The immediate question, in the opinion of competent observers, is rather how long she can supply the needs of her fighting men from the stores accumulated at Port Arthur and Dalny. It may be that unless the war is protracted it will not be necessary to use the railroad to any considerable extent for the carrying of supplies. In this connection, the statement of Joseph C. Byron of Williamsport, Md., who was a captain and quartermaster in the United States Army in China during the Boxer troubles, and afterward visited Korea and Japan, is of interest.

"There is a great deal of difference," he says, "between the ease with which supplies can be transported by land and by water. A ship seems to have unlimited capacity. We loaded the *Pak Ling* at Tacoma with hay and grain for Manila, and when by rights it should have been full, it took sixteen carloads of hay to 'square off the hatches,' as the mate called it. This ship carried more than 600 carloads. Imagine 600 cars standing empty at the eastern terminus of the Siberian Railroad and then making their way back over some thousands of miles for more supplies, on a single track road, a toilsome journey of weeks to get to the Pacific and weeks to get back! Meanwhile Japan with two ships can put the same amount of supplies where she needs them in two days.

"In the Santiago expedition we had several miles of freight cars waiting to get into Tampa, and more miles waiting to get out, and

it was a very serious tax on our Southern railroads, with all their facilities, to get our supplies on the dock in Tampa. Once there, they were swallowed up by the ships. A near base and water transportation are the strong points in Japan's favor, while a distant base and a single track road are Russia's weakness. Port Arthur, to be sure, is a base, but only a secondary one, for a struggle of this kind.

No campaign ever illustrated the advantages of being near at hand as well as the China campaign of 1900. The Russians at Port Arthur, and the Japanese at Nagasaki, were practically on the spot; the English at Hong Kong, and the Americans at Manila, seven days away. These armies got there, and were in from the beginning to the end. The others belonged to the class that 'also ran' in the list of winners. As a distinguished but somewhat illiterate soldier has remarked: 'In a fight the man who gets there firstest with the mostest men wins the battle.' And here is where Japan comes in. She will get there first, with the most men, and if the balance of Korea is like what I saw, she will solve her land transportation problem by having coolies pack the supplies on their backs, as I have seen them do with a sort of saw-buck arrangement strapped under their arms. A Chinese or Korean coolie will carry in this way from 100 to 125 pounds all day, and keep up with the army.

And here again the Japanese have an advantage. Their soldiers' ration is made up of rice and fish—mostly rice. As every one knows, this is the principal food also of Korea and China, and large stores of it are found in every seaport. On rice alone the Japanese soldiers will march and fight and one coolie will carry a week's rations for ten men. This reduces the subsistence problem to a very easy one. On the other hand, the Russian diet is bread and meat, and into the Russian camps in China bees and sheep were constantly being driven. The Japanese officer is also very simple in his tastes and habits, while the Russian is notoriously a high liver. The supply of an army is the hardest problem—men well supplied will win victories while the same men will run away if their stomachs are empty, and Japan has the advantage all the way through in the matter of supplies.

The Japanese officer is an earnest, enthusiastic man in his profession, never missing an opportunity to learn, and willing to engage himself as a barber or coolie or enter into employment of any description which will afford him the means of finding out something of the enemy's country. And I do not doubt but at this moment the Japanese know every detail of the Russian fortifications in the Far East. Japan lays her plans beforehand in every little detail, and follows them out. 'We will enter Peking on August 14,' said General Yamaguchi at the conference of generals at Tientsin, and on August 14 Peking was in the hands of the allies."

CANADA'S NEW ARMY.

(*New York Herald.*)

OTTAWA, Ont., Saturday.—Even Canada is providing for war. A bill which is to be put before Parliament for the purpose of providing for an army of two hundred thousand men has been drafted and no doubt will go through without a hitch.

The idea is to take such steps, by means of central depots and training schools, as to have always forty-six thousand volunteers on hand.

This number can be easily increased in time of war, by calling out country reserves to the number of one hundred thousand. In addition to this, there is to be a nucleus for a second line of defense of another one hundred thousand men. This nucleus is to consist of an additional field officer for each regiment of infantry, for instance; and for each company a captain, a subaltern, a sergeant, a corporal and two men, who are to keep track of the available men in their districts and are to raise the second line of defense as soon as the first one hundred thousand has started for the front.

Lord Dundonald, the present British General commanding the Canadian militia, seems to have got along much better with the local authorities than most of his predecessors, and it is said that many of the new militia departures are due to his suggestions.

The matter of appointing militia officers will be entirely changed. In the past this used to go a good deal by favor, but the latest orders issued say that no man can be appointed to a higher rank than that of provisional lieutenant unless he has the qualifications prescribed for the rank he seeks to attain.

It is also announced that in future no person shall be advanced to a rank higher than the one next to the one which he holds, and that no one can be promoted unless he has served at least two years in the other rank. Of course, allowance is made for a prerogative of the Minister of Defense and Militia to depart from these rules.

Sir William Nicholson, who is to observe the Japanese-Russian war for the British War Office, took some notes while passing through here of the condition of Canada's defences. He found that if the militia were called out at present about 33,000 would be armed with the Lee-Enfield rifles, but he was told that in five years from now 65,000 additional volunteers or reserve men will be armed with the new Ross rifle.

In regard to field artillery he found out that there were seventeen batteries well equipped and twelve quick firing Maxims. He was informed, however, that steps are being taken to increase the heavy artillery by long range guns, while the quick firing guns will also be increased in number.

Probably the thing that surprised him most was the new military shop, which has been fitted out with the utmost secrecy, and occupies part of the building used by the Ottawa Car Company. Here is a complete plant for the repair and manufacture of gun-carriage wheels on the Woolwich pattern.

The plant is the only one in the Empire outside of Woolwich, and where formerly, when anything went wrong with a gun-carriage it had to be sent all the way there, it can be attended to here in the future.

Mr. Prefontaine, Minister for Marine and Fisheries, will, it is expected, bring in his bill for the establishment of a Canadian navy during the coming session. Canada has the nucleus of a navy in her government boats, which embrace sixteen steamers and sailing cutters, carrying 424 officers and men.

These moccasin men-of-war, as the regular sailors call them, are not well adapted, as a rule, to the training of sailors, but with the British training ships, revenue cruisers now existing and new ones being built at Toronto and on the Tyne, things look far from discouraging.

The arming of vessels was begun in 1885, owing to the abrogation of the fishery clause in the Washington treaty. The Canadian

government then fell back on the treaty of 1878, and for a while there were serious clashes between Canadian boats and United States fishermen, but all that is past now and the Canadian boats have only to watch lobster fishing.

COMRADESHIP.

(Captain T. F. Allen, in *United Service Gazette*.)

* * * * *

AND while on the subject of comradeship, I am sure that no reader of this sketch will dispute the statement that the Irish race furnished some of the best soldiers of both the Federal and Confederate armies. The Irishman is always ready to cry with you in your troubles or fight with you in your battles, and no soldiers of this country (U. S. A.), either North or South, fought with greater valor than did the men of the Irish race. In this connection, permit me to speak of a stirring incident which occurred at Memphis, Tenn., when the Irish citizens of Memphis were determined to prevent an Irish regiment of the Federal Army from passing through the city.

This regiment was Irish—Irish from the colonel down to the drummer-boy, and they carried the flag of Erin side by side with "Old Glory," and felt and acknowledged a double responsibility in maintaining the honor of both. The army records show that it cast no discredit on either. The colonel of this regiment was a soldier by profession. He was gray and grizzled, and had a face so hard and rugged that you felt you could crack hickory nuts on it, but beneath this rugged exterior was the tenderness of a girl in the thoughtful care of the men of his regiment. He had served before the Civil War in the Second Dragoons, and had been a soldier of fortune in both Mexico and Central America. As you will see before the story is finished, he knew his business from Alpha to Omega, and he knew the Irish character from Cork to Londonderry. His men, bronzed by the southern sun, and hardened by campaigns, bivouac and battle, marched with the free swing which characterized the Army of the West. After service in the Tennessee and Mississippi campaigns, this Irish regiment was ordered to join the forces under General Grant before Vicksburg, where the siege was then in progress. The men were bivouacked outside the city of Memphis for an entire day, and planned numerous diversions therein, none of which, however, were permitted to occur, as no pass was granted, and not a man was permitted to leave the bivouac. Early in the evening orders were received to march directly through the city to the levee, where the steamboats were waiting to carry them south. The line of march lay through a portion of the city, where there was a large Irish population, all of whom were intensely Southern in their sympathies, and Federal troops had frequently been stoned in passing through this part of Memphis, which was known as "Little Ireland," and no welcome could be looked for by Federal troops in that locality. When it was known that an Irish (Yankee) regiment was to pass through "Little Ireland," there was great excitement, and the inhabitants gathered *en masse*. From house to gutter the sidewalks were packed with Irishmen, Irish women and Irish

children, whose faces were darker than night, and whose attitude (their hands behind their backs) suggested that every Irishman held a brick, every Irish boy held a boulder, and every Irish woman held a broomstick. Dislike, contempt and hatred were in every face, and sullen silence was the only greeting the approaching regiment received. But the Irish colonel of this Irish regiment had trump cards in reserve, and approaching the sullen mob in silence until just at the moment when it seemed the first brick would be hurled, the colonel gave a quiet command, and the flags were swung free, the green "Flag of Erin" floating alongside the "Stars and Stripes," while at the same instant the superb regimental band struck up the Irish air—

"The Harp that once through Tara's halls,
The soul of music shed,
Now hangs as mute on Tara's walls,
As if that soul were fled.
So sleeps the pride of former days,
So Glory's thrill is o'er,
And hearts that once beat high for praise,
Now feel that pulse no more."

The mob gave a gasp, then gulped down the hearts which had climbed up into their throats, then gave a cheer, and then a roar, and this angry mob became a shouting, welcoming throng, some embracing the soldiers in the ranks, some standing with bared heads and streaming eyes as the green flag of Ireland marched past alongside "Old Glory." The animosity of to-day was swept away in the remembrance of the deep love of yesterday. There was a wild rush back to their homes, and then, laden with food, and many bottles of liquid cheer, the population of "Little Ireland" followed the troops to the steamboat landing, swept over the lines that had been established around the regiment, and succeeded in convincing its members that blood is thicker than water. Many an Irish soldier, as they sailed away from Memphis that night, had bulging pockets, suggesting generous sized black bottles therein, which they had received, instead of the bricks, boulders, and broomsticks they were promised.

A VISIT TO THE COSSACKS AT THE BAY OF TALIEW-WAN.

(*Armée et Marine.*)

THE *Entrecasteaux* and the *Pascal* were anchored at Port Arthur alongside of six large Russian men-of-war. For the last four days our good friends tried their very best to drown us, so to say, in champagne, and, being three against one, not counting the land forces, they had easy play. At last they invited us, by way of a change, to make an excursion to the Bay of Talien-Wan.

The land of the peninsula of Liao-Toung is not very interesting, although it is not altogether as dry and barren as that in the immediate vicinity of Port Arthur; but the enthusiasm of our allies for their French guests gave everything an air of a great festivity. The stations, the cars of our train, were decorated with our colors intermixed with those of Russia, and at every station the military band which accompanied us played lively airs. The journey turned

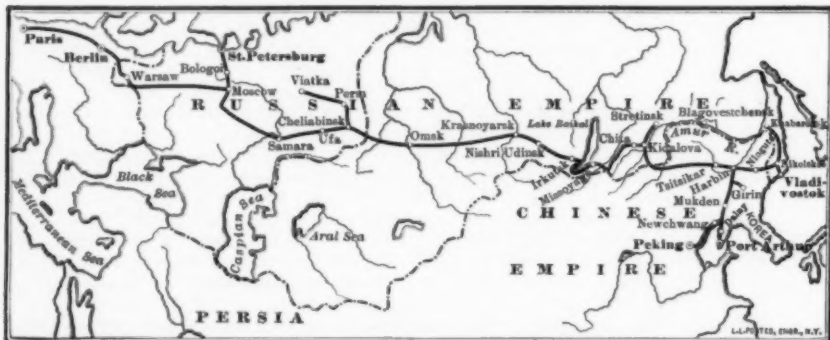
out very pleasant and furnished many agreeable surprises, the most interesting one being our visit to the Cossacks at Talién-Wan.

A number of *Sotnias* awaited us on a vast drill ground, in line, with sabers drawn. The Cossacks are not, as is generally supposed, large and good-looking men; hardly of medium height, thick-set, ugly, bronzed complexion, they always have under their fur head-gear a martial, almost a savage appearance. Their horses are also small, but without speaking of their endurance, we will presently see what they are able to do on the gallop.

At this place there had been erected in a straight line three uprights, having a small platform with a round ball on top of each, representing the head of a man. One of the Cossacks came along at full speed, the point of the saber to the front, overthrows the first head, cuts off the next, and hits the third with the same precision, sending it rolling to the ground. The balls having been placed in position again, a second Cossack would go through the same exercises and with the same result, and this continues until about fifteen of them had shown their skill in that respect, when the order of drill was changed. Acrobatic feats were now in order; completely armed and equipped, their horses at a gallop, they would throw themselves to the rear until their hands touched the ground, stand upright on their horses, jump to the ground and remount, showing besides in different ways their aptness and audacity on horseback, for which they are universally known.

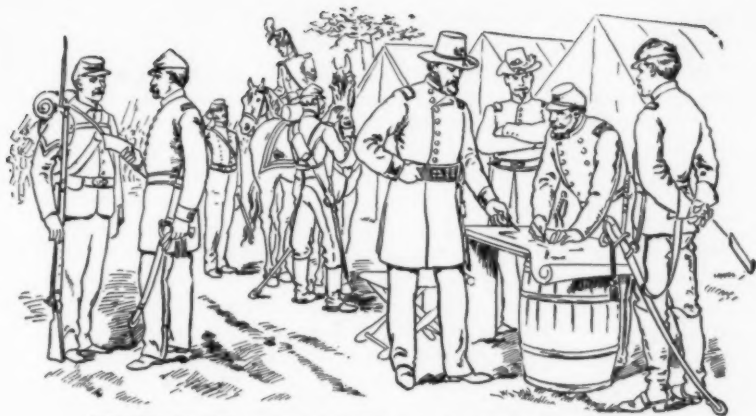
After this two Cossacks came past on a gallop—one a short distance behind the other, feigning a pursuit. The first turns around, fires a shot at the other, and then continues to make his escape, whilst his enemy, supposed to have been mortally wounded, lets himself be dragged by his horse, keeping his feet in the stirrups; then, when arriving at the end of the maneuvering field, gets in position again by a simple operation of the reins.

After that a Cossack, seriously wounded, is lying on the ground; a comrade, arriving in full speed, stops suddenly, makes his horse lie down, picks up the body, places it on the horse in front of his saddle, and as soon as he is again in the saddle, the horse rises and starts off on a gallop.



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THE RUSSIAN RAILWAYS AND CONNECTIONS—PORT ARTHUR TO PARIS.



Comment and Criticism.

"Russo-Japanese War Notes."

An Editorial Point of View.

As we go to press (April 12th) the curtain falls upon the close of the first act of the great military drama now being performed in the theater of war in the Far East. A brief summary of the preliminary operations leading up to the present situation—with the two armies confronting each other across the Yalu and at Niu-Chwang—may here not be untimely.

The world is familiar with the details of the surprise to which Admiral Togo—with his fleet of 6 battle-ships, 4 armored cruisers, 6 commerce destroyers, and a number of torpedo-boats—treated the Russian squadron as it rested (Feb. 8th) in a false security in the harbor of Port Arthur. At that time the Russian fleet in those waters (7 battle-ships, 8 armored cruisers, 14 unarmored cruisers, 10 torpedo-boats) was divided; 4 armored cruisers being ice-bound at Vladivostok, one, the Variag at Chemulpo, and the remainder at Port Arthur.

* * * *

The first attack by the Japanese, which caused serious damage, was followed by several attempts to block the channel leading into the Port Arthur harbor, but so far without success. They were more fortunate in entering the harbor of Chemulpo and destroying the two Russian war vessels (the Variag and Korietz) at that point after a gallant resistance.

It was clearly to the advantage of the Russians to postpone the outbreak of hostilities as long as possible. The dispersion of their

fleet may have been due partly to their fear of precipitating hostilities by concentration, and partly to the fact that the harbor of Vladivostok was still frozen over.

* * * *

The Japanese were not slow in taking advantage of the situation by destroying the cruisers at Chemulpo and bombarding Port Arthur. The accounts are not yet clear enough to show how the Japanese torpedo-boats succeeded in the affair. Of course the Russians did not expect them, but their battle-ships were not sufficiently covered by an outer line of torpedo or patrol boats. Their electric light service may have been imperfect, and it was unfortunate for the battle-ships that they had not steam enough to save themselves.

* * * *

Although the necessity of covering the main line of battle with a thinner line, like that of skirmishers on land, is thoroughly recognized, it has not been as fully realized at sea, because torpedo-boats have never had so good an opportunity to utilize their offensive power as in this war and at this harbor. If Admiral Makaroff, one of the greatest exponents of the tactics of the torpedo-boat, had been in command, from the first, the result might have been quite different.

* * * *

The attempts to block up the harbor by sinking hulks afford several valuable lessons to those interested in problems of seacoast defense. The repeated bombardments from long range may have amused the Japanese, but it is interesting to hear that the Russian officials would not accept them as an excuse for their clerks to leave their desks during office hours. That could hardly have been possible if the Japanese had any guns of greater than 9-inch caliber.

* * * *

The loss of Russian vessels from submarine mines in their own harbor shows lack of practice in the art of planting them. Probably the Elia or other automatic-anchoring and self-acting mines were employed, but whether planted by the Russians or, in some cases, by the Japanese remains to be seen. In any event, the ground over which the vessels maneuvered could not have been properly swept.

* * * *

On our own part, the battle-ships could generally find safe anchorage in the inner harbors, where the rapid-fire guns of our land batteries would materially help to keep off the hostile torpedo-boats. The close proximity of the Japanese ports enabled them to bring into action a much smaller class of torpedo-boat than we would have to fear.

Although the fortifications were partly of an antiquated type, the fire of the Japanese fleet appears to have accomplished nothing commensurate with the great cost of the ammunition expended.

* * * *

The main interest now (April 12th) is centered upon the Russian fleet and Admiral Makaroff's efforts to concentrate it. It does not appear to have been annihilated as at first reported. At recent naval maneuvers in Europe it was demonstrated that a fleet scattered about in several harbors, and blockaded by superior forces, had a very good chance to concentrate by sending out one vessel at a time, to a predetermined point, until a force was assembled greater than either of the single blockading squadrons. If, however, the Japanese fleet keeps together and away from the harbors, the Russian fleet may find then an opportunity to concentrate. If it attempts to guard the transports, this is another opportunity. If the transports attempt to cross alone, depending upon their fleet to watch the Russians, they run a serious risk. Altogether the naval problem is a most interesting one.

* * * *

The probable strength of the opposing armies in the field is reported (April 2d) by the *Figaro* correspondent (at St. Petersburg) as follows:

"A detailed list of the Russian troops in the Far East was semi-officially communicated to me to-day, and though I am forbidden to betray the secrets of mobilization, I am allowed to give the general figures. The list was drawn upon the evening of March 28th by the general staff at Harbin. There were then in Manchuria 170,000 infantry, 17,000 cavalry and 256 cannon. Of this number 20,000 infantry, 5000 cavalry and 32 cannon have been told off to guard the railway.

"Although the bulk of the troops is concentrated opposite Korea, the strategical front extends sixteen hundred kilometres from Vladivostok to Niu-Chwang on the left bank of the Liao River, the right bank being considered neutral territory.

"By June 28th, 130,000 more infantry, 30,000 cavalry and 250 cannon will have been sent out.

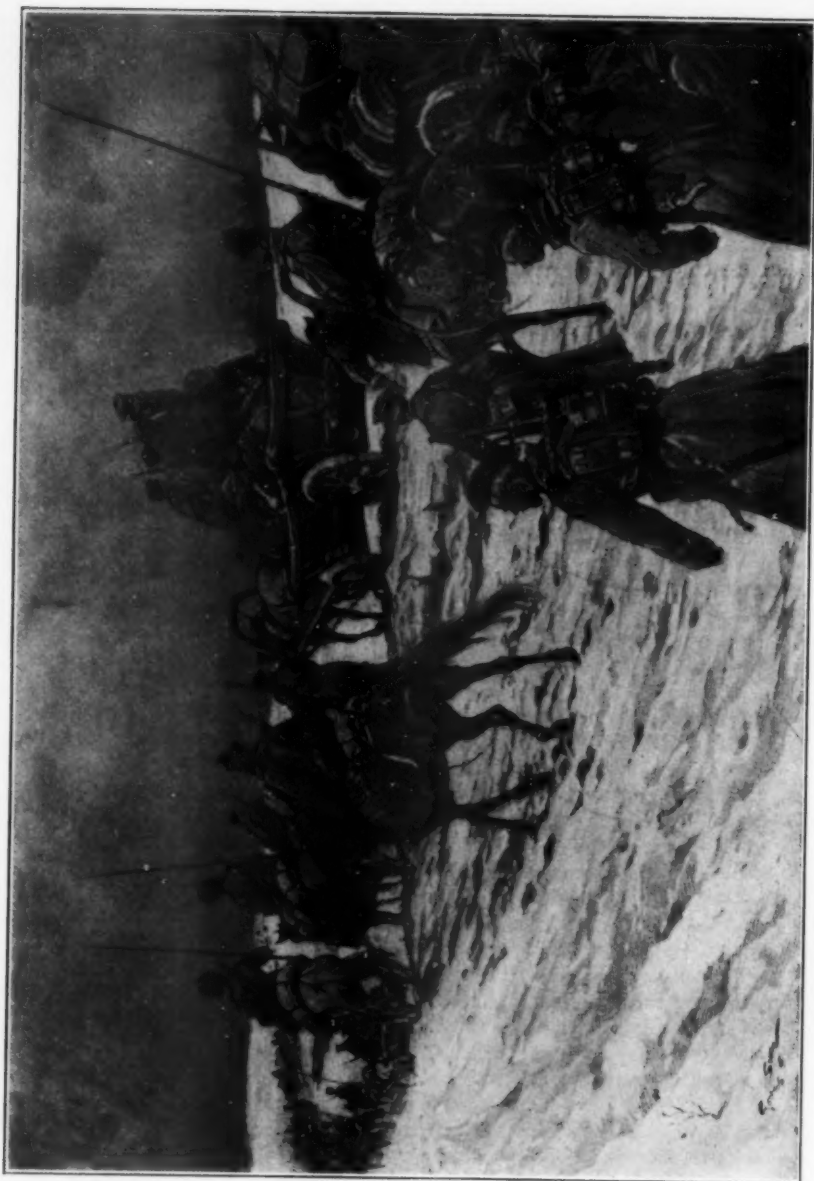
"It is estimated that the Japanese troops landed do not exceed 80,000, and that 100,000 are waiting until the commissariat is assured before being transported, as it is impossible to feed them in Korea."

A later despatch from Kobé fixes the total Japanese force "in motion" at 260,000 with 120,000 in the Third Reserve.

These are believed to be reasonable figures agreeing with other reports that appear to be reliable, especially with the estimates of Marshal Yamagata, upon the Russian strength, elsewhere quoted.

* * * *

At the opening of hostilities, with the exception of the garrisons of Port Arthur and Vladivostok, it is probable that the main body of the Russian forces was in the neighborhood of the fork of the railroads at Harbin. In view of the usual disposition of the Russian armies, it is probable that the whole frontier between Korea and Manchuria was covered with a screen of cavalry.



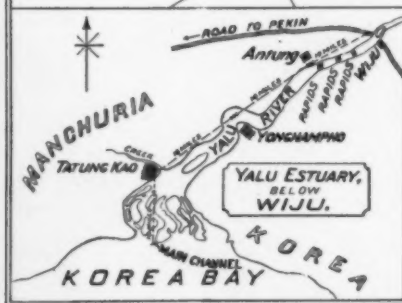
RUSSIANS IN MANCHURIA.

This unfinished Map will be completed in time for the
additional details—t



and in time for the next issue of the JOURNAL by the insertion of
 details—towns, rivers, roads, etc.





KOREA

From
Drawn

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WAR MAP OF KOREA AND MANCHURIA,

From the Best Official Sources,

Drawn for JOURNAL OF MILITARY SERVICE INSTITUTION,
GOVERNOR'S ISLAND, N. Y. H.

Journal of Military Service Institution
SCALE OF STATUTE MILES.
E. C. Slater, del.

After sinking the Russian cruisers at Chemulpo, the Japanese landed there and pushed on as far as Ping Yang. Having obtained a foothold at this point, they were then enabled to reinforce their position from the neighboring port of Chinampo. From those positions the strategic advantages of holding the crossing of the Yalu River are apparent.

* * * *

If the Japanese can push forward in large numbers across the Yalu, they will be in a position to divide the Russian forces and strike to the right or left as opportunity may offer. If, on the other hand, the Russians can confine them to the peninsula of Korea, they can restrict their field of action materially, and at the same time protect Harbin and Vladivostok and the fields and meadows of Manchuria, and cover their railroad communications.

Meantime their reinforcements can pour in at their leisure until their numerical superiority enables them to confine the Japs to a few seaports, where they can entrench themselves and derive their supplies from the sea.

The Terrain in Korea.

A French military expert, writing in the European edition of the *N. Y. Herald*, says:

In view of the appearance of the Japanese at UnSan and Kang-Kyei, which leads to the supposition that they are thinking of invading Manchuria from the north of Korea, it is interesting to cast a rapid glance over the topography of the regions they will have to traverse if they carry out this plan.

From the Ping-Yang toward the north and west there are three principal roads—the road which passes through An-ju and continues toward Liao-Yang; the Kang-Kyei road and that from Wonson. From Wonson there is a road passable for vehicles which follows the coast and goes to Vladivostok. The Kang-Kyei road passes thence toward the Yalu and follows its course till near its source it crosses to the Toomenoula, which it follows to the bend that the latter river makes not far from its mouth. This road, as we have already said, leads to the Pass of Niao-eur-chau, which it traverses.

It will be necessary first to cross the Yalu, and the Japanese will find before them a very mountainous country covered with almost virgin forests, where there are in some places altitudes of more than eight thousand feet. The Kirin road follows a valley also cut by virgin forests. Only two or three paths afford communication with the Toomenoula route and the north of Korea.

The branch road, which from Niao-eur-chan runs westward, passes through quite a number of towns and crosses two principal heights before arriving at Sing-King, where it begins to be passable for vehicles as far as Mukden and beyond.

One can with difficulty imagine an army, with all its convoys and war material, venturing into the roads which it must follow to reach Sing-King or, further to the north, Kirin. These roads are mere by-ways only traversed by people afoot, at least in Korea. Thawing

weather will make them still more impassable and more dangerous for troops. Moreover, the impossibility of making use of several roads or paths almost parallel will necessitate a march of a whole army on the roadway.

Now, it is calculated in Europe that an army corps, mobilized and defiling in single column on only one road, covers more than nineteen miles from head to tail. Thus it will be seen what an unending task would be represented by sixty or eighty thousand men compelled to pick their way in single file in paths where the inequalities of the land prevent the passing of more than two or three abreast. It would seem that a few thousand resolute men would be enough to halt indefinitely such a column.

The Cossacks would soon cut it off from its supplies and put it in a most perilous position by assailing it suddenly on its flanks and at a large number of points at a time. We may, therefore, be permitted to say that the Japanese will not allow themselves to undertake in full thaw, a task of this kind, which might lead them into a disaster, and that, if they now take the offensive, it will be at the mouth of the Yalu that their great attack will be made.

Besides, everything leads one to believe that it is really toward Wiju that they will direct their army, organized at Chieng-Yang and at present concentrating toward Anju. This army has material for pontoon bridges ready to be thrown across the Chin-Chien River, which flows not far from Anju and whose passage is already as good as accomplished by the Japanese, as their outposts cover the line of Chong-Ju, Pak-Chien and Yeng-Flang.

From Anju the "mandarins" road skirts the coast for a distance of ten or twelve miles, passing four or five rather high hills and three rivers of little importance and several towns or villages before reaching Wiju. This road is an excellent one, dry and well kept in repair.

Field Marshal Yamagata's Views.

A special cable from a *Chicago Daily News* staff correspondent from Tokio says:

Field Marshal Yamagata, who, after the Emperor, is first in command of the Japanese forces and was the original organizer of the Japanese Army, said to-day that the Japanese may have to fight odds of two to one, and that the clash may come at the Yalu River. The Marshal said:

"Russian troops have been coming south for a long time, and it is evident that a conflict must result. As matters have turned out, it would have been better if the war had occurred when the Russians first occupied Manchuria, because ever since they have been strengthening their position in that province. Our statesmen, however, wished to preserve peace as long as possible.

"It is difficult to say where the first big land battle will take place. The Russians seem to be in force between Liao Yang and Kai-ping, on the Manchuria Railroad. They may cross the mountains and possibly meet us at the Yalu.

"Bridges and roads north of An-ju have been destroyed by the Russian troops, and therefore the Japanese advance will be difficult. No doubt if the Russians destroy the Manchuria Railroad it may not be difficult to repair it, for the use of the Japanese troops. We might even replace old material with new, but the difficulty is to reach the

railroad. Five months ago the Russian generals planned to put 350,000 men in the field. They must have contemplated supplying them with ammunition and food.

"Two rivers that empty into the Arctic Sea run near Lake Baikal. They are navigable in summer, and can be used for transportation. The Russians in this way need not rely entirely on the railroad. Large supplies of American flour have been going to Vladivostok for years, and we must expect to meet a well-equipped and well-nourished army of 350,000. It is a difficult matter to fight a nation with 3,000,000 soldiers. We have to lay our plans very carefully.

"There is no doubt that the Cossack cavalry will worry the Japanese Army, which was originally intended for home defense in the mountainous country, and is mainly composed of infantry. We must work with the material we possess. When the Japanese Army is compared with other armies it must be remembered that it only has been lately organized. I had no small share in its organization, and therefore I see its faults and try to improve it, but never find that it reaches my ideal."

Japanese Field Equipment and Transportation.

Jack London, correspondent of the *N. Y. American*, writing from Ping Yang (March 5), says of the Japanese troops:

American and British officers, pleased though they are with the conduct of the men, are especially concerned with the equipment and commissariat. Confessing that their own soldiers would not be so quiet and orderly, they go on to enlarge upon the equipment of the men and upon the whole system of transporting them, provisioning them and shoving them to the front.

In the first place, food, luggage and everything in the way of baggage which must be carried with an army are done up in packages which can easily be handled by single men, and which, if need be, can be carried on the backs of men. So there are no army wagons nor army mules. Pack horses and coolies do the work; and though many Korean bullock carts have been put into service, there is no necessity for them.

The rice, which is the staple food, is done up in sixty-pound sacks. One coolie can carry a sack all day over the most rugged country. Two sacks go to make the load of a Korean pony and from three to four sacks the load of a Japanese pony. Meat is put up in one-half pound tins, eighty of which tins are encased in a box. One horse, under three of these boxes, carries one meat ration for a company. Four horses carry a meat ration for a battalion.

A sheet-iron cylinder, carried in sections, constitutes a camp stove. This stove is twenty-seven inches high and thirty inches in diameter. In this the fire is built and into it is fitted a sheet-iron kettle. Into this in turn is fitted a perforated kettle which the rice is put into and cooked—and cooked without scorching. One kettle will cook rice for one hundred men. Eight or nine such kettles will suffice for a battalion.

Sodium sulphate, in tins, is part of the soldier's outfit. It is to be doubted in a country so fearfully unsanitary as Korea, if a drop of healthy drinking water can be found. So the sodium sulphate, in little flannel sacks, is placed in boiling water to precipitate the impurities, and the little brown man is thus given a larger opportunity of dying on the battlefield and of killing Russians ere he dies. Cer-

tainly, so far as Japan is concerned, it is more economical for her soldiers to be filled with lead than with fever germs.

In small cotton bags, weighing little and occupying less space, are emergency rations. This ration is made of rice, boiled and then dried in the sun till each grain has shrunk to the size of a pinhead. Each soldier carries six of these rations in his knapsack. On a pinch they would suffice him for days. And always it must be remembered that rice is to the Japanese what bread is to us and butter and meat to boot.

The soldier's kit is light and complete. Including 120 rounds of ammunition it weighs 42½ pounds. The kit of the American soldier weighs 55 pounds. I may quote General Allen as saying that the Japanese infantry is as well equipped as any in the world.

The soldier's mess pan is after the German pattern—aluminum and blackened on the outside. It will hold two rice rations, which, cooked in the morning, he may carry with him for the day. The water bottle, likewise of aluminum, holds a full pint.

There are two methods of carrying the kit. First is the European knapsack on the back; second, and probably the better, is the American banderole—the blankets rolled and twisted over the shoulder and around the body. In connection with this is a sort of narrow bag, open at both ends, six inches wide and four feet long, made of blue cotton drill, which likewise crosses the shoulders and winds around the body.

In Seoul was to be observed a rather curious thing—a revival of the old navy grog. Twenty gallons of saki (the Japanese wine made of rice) was distributed each day to a battalion. But I learned that only in Seoul was this grog ration to be distributed. Once on the field the soldiers would have to content themselves with their boiled water, purified by sodium sulphate.

* * *

Indeed, the supply problem becomes one of the most interesting features of the impending struggle in Manchuria. While the Russians will doubtless depend upon "the country" to supply certain articles of subsistence, and for immediate use will draw upon reserves of provisions already accumulated there, eventually, Europe will be the source from which Kuropatkin's army must be fed, and the railroad, the instrument for that purpose. Will it be equal to the demand upon it?

It is true that the Japanese army has the "shorter haul" of the two belligerents, and so far, uninterrupted communication by sea; nevertheless, as it penetrates into the interior the rough nature of the terrain, impassable roads and Cossack tactics, may cause Japan serious embarrassment.

The Japanese "Tokkan."

A writer in the *N. Y. Evening Mail* mentions the fact that the Japanese are excellent hand-to-hand fighters. The courage that promotes this warfare they inherited from the samurai, who fought with their formidable two-handed swords in the time of junks and bows and arrows. The Japanese soldiers of to-day dispense with the heavy old weapons, but their officers and cavalry riders carry the sabers, which may be swung lightly with one arm. The blade of these sabers is of the Japanese workmanship handed down from the old time, and

excels even that of Damascus. The skill in bayoneting is another thing that the Japanese infantry has attained to a remarkable degree.

But the strongest point of the Japanese Army lies in the readiness and eagerness of the infantry to charge. In no battle other than that fought by the Japanese has been shown so much recklessness and daring spirit in "tokkan" (sally), and no commander other than the Japanese resorts to this warfare so frequently.

* * * *

The Japanese infantry in dash has never known a retreat; to it are open only two courses, victory or death. It was by these tactics that most of the strongest forts were captured by the Japanese army during the Japan-China war. At Wei-Hai-Wei—where the Japanese general, Yamaji, who is depicted by James Creelman as "one-eyed demon," because of his single sightedness and bravery, found the word "shi-nei" (be killed) more appropriate than the command "forward"—more than two-thirds number of the charging infantry were shot before it reached the goal, yet the rest succeeded in capturing the forts.

During the Manchurian campaign, in the same war, an infantry company in "tokkan" encountered a river, not wide, but of unknown depth, at which the captain gave the command "The whole company drown!" The remarkable command was obeyed with mechanical readiness, and except a few men drowned the company crossed the stream and routed the Chinese.

The Japanese admit the defect of their cavalry horses, but they do not expect to depend on the cavalry for purposes other than scouting. The "tokkan" suffices all where a cavalry charge is required, and perhaps in its effect it will not be surpassed by that of the Cossack cavalry.

It will be a great sight when one of these "dashes" is met by the Cossacks. The Japanese have shown something in their naval warfare, in their work with the torpedo flotilla. They are yet to show something equally brilliant on the land, and this will be the "tokkan" of the infantry.

An English Opinion.

Mr. Spenser Wilkinson writes in the *London Morning Post*, April 7th, as follows:

"The Japanese now appear to hold the left bank of the Yalu from its mouth, but there is no means of knowing the extent of their front. Their left flank is at Yongampo, on the estuary, and, as they hold Unsan, their right flank may be at Pyokdong, sixty miles up stream, or even further away from the left.

"The Japanese force is apparently composed of the Guards and the Second and Twelfth divisions. Two more divisions, the First and Third, are reported to be in transports near Yongampo. These may be intended to land on either bank of the river, according to events and to the nature of the operations of the next few days.

"The Yalu, at Wiju, where the main road crosses it, is one hundred and twenty miles in a straight line from Liao-Yang, where the road touches the railway. The road between the two places falls into three unequal lengths. The first leads to the town of Feng-Wang-Cheng, where the Russians are believed to have a force supporting their advance parties on the Yalu. The second leads through a hilly

defile, turning first northward and then westward, to penetrate the Motienling range, and the third leads from this range to Liao-Yang.

"The Russian commander can hardly intend to make a firm stand on the Yalu or in front of the defile and hills, but the Japanese commander could wish for nothing better. He would in that case probably cross the Yalu at some distance above Wiju, with his right wing as strong as possible. The advance of the right wing, assuming it to be strong enough, would compel the Russians to retreat and leave open a passage for the left wing.

"Very much depends upon the strength of the Japanese force on the Yalu and its proportion to the Russian forces available in Southern Manchuria, for if the Japanese general has superior numbers he may aim at the railway north of Mukden.

"The distance from Boughton Bay to the middle Yalu is not greater than that from Ping-Yang to Wiju, and it is conceivable that the right wing of the Japanese force may be stronger than would be inferred from the list of divisions known to have landed at Korea.

"But once the Japanese outposts are on the line of the Yalu, troops will be moved in a few days from the west coast near Anju to the Yalu above Wiju.

"An attack on the Russian left, or a movement to turn it, would probably compel the Russians to abandon the coast defences below Antung and clear the way for a Japanese landing there or at Antung, which would then become the Japanese base of supplies. Some days must probably be allowed for the movement of Japanese troops to concentrate behind the screen formed by the Yalu and to reconnoiter the strength and position of the enemy in their front.

"The presence of a fleet of transports near the mouth of the Yalu shows how completely the Russian squadron at Port Arthur is dominated by the Japanese squadron, even though the whereabouts of the Japanese squadron is unknown."

Russia's Naval Plans.

The Russian naval plan for retrieving the reverses at Port Arthur and Chemulpo has been communicated to one of the embassies through official channels having access to the highest naval authorities at St. Petersburg. The plan is explained (*Paris, April 7th*) as follows:

"Russia recognizes that Japan now has preponderating naval strength in the Far East. Therefore it is essential to reverse the present Japanese preponderance. This will be attempted by two distinct moves.

First, urgent efforts will be made to have a naval concentration at Port Arthur, the Baltic, Red Sea and Vladivostok fleets joining Vice-Admiral Makaroff's command, if possible, and thus giving the combined fleets preponderance over Vice-Admiral Togo's.

Second, it is foreseen that it will be difficult and probably impossible to effect this concentration, as Admiral Togo may intercept the Baltic fleet before its arrival at Port Arthur. In that event the Baltic fleet, which is comparatively small, will attempt the perilous task of engaging the large Japanese fleet, in the hope of disabling some of the Japanese ships and thus reducing the Japanese effectives."



Admiral Porter.*

AN able and competent writer on naval affairs has, in a most interesting volume, presented to the public more than an outline of Admiral David D. Porter's life and services. From the first chapter to the last the reader is made to feel the influence of the energy and natural capacity of Porter in every naval enterprise in which he was engaged.

Porter was original; painstaking in obtaining information; ready to suggest, and willing to lead in the carrying out of his plans—always conceived of far in advance of those with whom he was associated—always aggressive. He was the man for either a subordinate position or for the position of commander.

The author presents all of these characteristics in a masterly manner and puts the reader in sympathy with this best type of the naval hero from the date of his brilliant service in the war with Mexico to the time of the surrender of Lee at Appomattox.

However, the author departs from the purely historical scheme in one portion of his biography of Porter, and to aggrandize Porter's services reflects upon the United States Army and upon the commanding officer at Fort Pickens. This mars the book.

When the army friends of the Admiral read the chapter on the cruise of the *Powhatan* and find on page 119 that Colonel Harvey Brown of the 2d U. S. Artillery was worthy of dismissal and that this statement is followed by: "It only shows how lax was the discipline of the army at this time. No notice was taken of Brown's conduct, and he was even brevetted. There was absolutely no excuse for him"—they may well hold up their hands in amazement and deeply regret that any compiler of the official reports and orders of the President and War and Navy Departments should have been led to express such an opinion of Colonel Brown or to presume to reflect upon the condition of the discipline of the United States Army at that time.

"He, Colonel Brown, was even brevetted." Does not this prove that Brown acted under instructions from the government?

We who were there and have since April, 1861, held high rank

*Admiral Porter (Great Commander Series). By James Russell Soley. New York, D. Appleton & Co., 1903.

and exercised large commands know the injustice of these remarks, and we jointly pronounce these animadversions uncalled for and not sustained by the reports or by the action of the government.

The writer served under Colonel Brown in Florida for one year (1855-56) when the Seminoles had broken out in open hostility. He sailed on the *Atlantic* to Fort Pickens and left Florida with Barry's Battery "A" in time to serve in that battery in the first battle of Bull Run, and served in the Army of the Potomac until it was disbanded. He never met an officer of the old army who spoke doubtingly of Brown's patriotism, ability, or even aggressiveness.

It was Colonel Brown's duty to respect the opinion of his engineers and these engineers were General Tower, General Duane and Colonel Reese. These officers, men of brains, not mad and intemperate enthusiasts, knew that Fort Pickens was constructed to defend the channel to the south and west of the site and that its north and east scarps were built to be battered down by Barrancas.

Did Admiral Porter take that into consideration—did Mr. Soley know that this was the condition of the fort?

Lax was the discipline of the army? Who trained our volunteers to war? These very men charged with lax discipline.

It may well be asked of the author of "Porter's Life" to tell us now what would have become of the old worn-out *Powhatan* if she had passed the batteries and Barrancas.

Bragg would not have had much anxiety about the effect of his batteries on one ill-provided wooden vessel should she attempt to engage with them. Was Bragg unknown as an old officer of the artillery in the Mexican War?

A review of this book has not been attempted. It has been considered proper to warn military readers against false impressions in regard to Gen. Harvey Brown and the discipline of the United States Army in 1861.

It is to be regretted that the author's enthusiastic narration of the services of the grand admiral—picturesque at times—has given to the friends of Admiral Farragut the impression that the services of that great admiral have been disparaged.

A. S. W.

The Shenandoah Valley in the Civil War.

IN his recently published volume,* Col. Sanford C. Kellogg has made a very valuable contribution to the history of the Great War. It is also unique, so far as the writer is aware, in summarizing the exploits in that field, so prolific of disaster to the Union forces, until Sheridan entered this land flowing with milk and honey and made it untenable to a hostile force. The kid glove policy had preserved the rich granaries of this fertile section with scrupulous care and made it easy for Lee to make his two invasions into Maryland and Pennsylvania, subsisting largely on the resources he found en route. A facetious Winchester girl was accustomed to boast that from her home on the Strasburg pike as it enters Winchester, on the classic site known as Potato Hill, she had

**The Shenandoah Valley and Virginia, 1861 to 1865; a War Study*, by Sanford C. Kellogg, U. S. A. New York and Washington, The Neale Publishing Co., 1903.

seen the backs of the retreating Yankees at least eighty times (Colonel Kellogg says sixty-eight), and it is fair to assume that she derived less pleasure from the sight of the backs of the retreating Confederates an equal number of times, and was particularly discomfited when the gallant little Sheridan came to Winchester to keep house and stay. It is a sad reflection on our early methods of making war that, to quote the author's language, "that city changed commanders so frequently that it became customary for the inhabitants to ascertain each morning, before leaving their dwellings, which flag was flying—the Stars and Stripes or the Stars and Bars."

The history opens with the seizure of Harper's Ferry and the Patterson Campaign in 1861, and closes with the dispersion of Early's small army at Waynesboro in February, 1865, and the undignified scamper of that redoubtable chieftain and his general officers into the sheltering woods. There are but 247 pages, and they read very much like an official report, with almost no digressions for the indulgence in minor and unimportant details, which, however, sometimes enliven the pages of even the most dignified history. The only diversion is embraced in the three pages given to a recital of Washington's service in that section, 1753-1758. Facts and figures are the result "of an exhaustive study of the War of the Rebellion records and maps," to which must be added the personal experiences of the author, who was himself a member of General Sheridan's staff.

The scarcity of severe criticism is notable and worthy of special comment. The habit of fighting battles backwards is well nigh universal, and it is pleasant to commend one writer who does not indulge freely in postmortems. There are two or three lapses only; but we can forgive him his reference to several conspicuous failures on page 69, where he says "whereas those leaders against whom he [Stonewall Jackson] had operated had been selected either to gratify a political faction or to please a military clique, and who hoped to secure either professional advancement, or political preferment." He will invite comment at page 77 in his statement that after South Mountain, General McClellan "did not push his attack with sufficient vigor." The 19th Corps will also object to the comprehensive assertion (p. 222) that at Cedar Creek, Kershaw attacked and carried the left work and shortly afterward Gordon attacked in the rear, "and they swept everything before them, routing the 8th and 19th Corps completely." It is not disputed that Molineux's Brigade of the 19th Corps was in line, about to go on a reconnoissance, when this attack was made, and in his official report he says: "Finding that we were completely outflanked, that the retreat was general, and that my men were rapidly falling from a fire they could not return and that a line of battle was being formed in the rear by the 6th Corps, I moved out by the flank in good order," etc. There is no doubt of the surprise and rout of the two small divisions of the 8th Corps, but it is very well established that the 19th made a considerable resistance and only retired under the orders of General Wright when he learned their flank was turned. Even the Eighth showed some fight and lost 46 killed and 268 wounded.

Much light of an interesting character is thrown upon the partisan rangers (guerrillas) who annoyed our troops so much in the valley, though serving at the same time as a valuable aid in keeping our columns closed up and free from stragglers. Such warfare was not creditable to the Confederate Government, and in the end did

not pay. The lack of discipline and the outrageous excesses committed by these roving bands upon their own people gave the authorities at Richmond grave concern and caused the consolidation of nearly all such irregulars with the regular troops.

So also Colonel Kellogg brings out in strong relief the very valuable services of General Averell, whose splendid work has been overlooked or underestimated. So much has been claimed by the Confederates of the superiority in numbers of the Union forces that it is well to quote the author's remark that "during the last two years of the war, the Confederate troops never showed the strength of their troops in action or their casualties."

We repeat that Colonel Kellogg's book shows the most careful and conscientious work. It is most interesting reading and especially so to those who traveled up and down this great military race-course, more or less, from 1861 to 1865.

HORATIO C. KING.

Washington During War Time.*

THIS book contains 215 pages, octavo, is well printed on fine white paper and appropriately bound in Army-blue cloth with gold lettering on the back and on the front side. It contains forty-six well-executed illustrations, comprising portraits of President Lincoln, Gen. Winfield Scott and other leaders of the period, pictures of public buildings and forts and a map of Washington and its vicinity.

The first of the series of fourteen papers constituting the volume, is one on "Washington on the Eve of the Civil War," by Wilhelmus Bogart Bryan, Chronicler of the Columbian Historical Society. It treats of the city of Washington in its then physical and social aspects. The next paper is on "The Military Situation in 1861," and is by Dr. Marcus Benjamin, President of the Society of the War of 1812. It tells of the terrible gloom which prevailed in Washington during the winter months of 1860-'61, because of the apprehended nearness of civil war, of the anxiety that was felt lest the friends of those who were disloyal should succeed in turning over the Government to the Southern States, and of the relief of mind and return of confidence which came after the organization of the District of Columbia volunteers and the arrival of troops from the Northern States. A paper on "The Defenses of Washington," by Gen. John Gross Barnard, Corps of Engineers, U. S. Army, describes the great chain of forts and batteries, thirty-seven miles long, encircling the city. The important part taken by the Naval Forces, afloat and ashore, in the defense of Washington in 1861 and 1862, is well described in a paper by Commander Richard Wainwright, U. S. Navy, a participant. "Early's March to Washington" is the title of an excellent paper by Gen. Thomas McCurdy Vincent, U. S. Army. "Fort Stevens, Where Lincoln was Under Fire," is by William Van Zandt Cox, Author of the "Defenses of Washington," and relates,

**Washington During War Time.*—A Series of Papers Showing the Military, Political and Social Phases During 1861 to 1865. Official Souvenir of the Thirty-Sixth Annual Encampment of the Grand Army of the Republic. Collected and Edited by Marcus Benjamin, under the Direction of the Committee on Literature for the Encampment. Washington City, 1902.

among other interesting things, the incident of President Lincoln standing on the parapet of Fort Stevens, under the enemy's fire, coolly watching the progress of the battle, much to the consternation, and against the earnest protest of Gen. H. G. Wright. "The Death of President Lincoln," by Gen. Thomas McCurdy Vincent, U. S. Army, an eye-witness, is of great historical value. "The Grand Review," a paper by John McElroy, Senior Vice-Commander of the Grand Army of the Republic, is a thrilling description of the grand review of the veteran armies by the President of the United States in the city of Washington, in May, 1865, when returning to their homes to be mustered out of service, after the close of the Civil War. "The Military Power of the United States as Shown during the War of the Rebellion," by Gen. Thomas McCurdy Vincent, U. S. Army, is a paper of great value and will interest advanced students of the art of war. The paper on "The War Hospitals," by John Wells Buckley, Surgeon in charge of Patent-Office Hospital, is a fine exposition of the subject covered by its title. "The Humanities of the War," a paper by William Jones Rhees, Archivist of the Smithsonian Institution, gives a history of the philanthropic work of Miss Dorothy Dix, the Sanitary Commission, the Christian Commission, the Young Men's Christian Association, etc. "Arlington and Battlefield Cemeteries" is the title of a beautifully-written paper, by Isabel Worrell Ball, Chairman of the Press Committee of the Thirty-Sixth Annual Encampment of the Grand Army of the Republic. It contains interesting references to the Custis and Lee families and their relation to the Arlington estate. "Political and Social Conditions During the War," by Brainard H. Warner, Chairman of the Thirty-Sixth National Encampment of the Grand Army of the Republic, an old resident of Washington, is an impressive paper and incidentally throws light on some of the deep-lying obscure causes of the Civil War. "Washington of To-day," by Henry Browne Floyd Macfarland, President of the Board of Commissioners of the District of Columbia, is the concluding paper of the series. It traces the development of the straggling city of 1861, which was little more than a large country town, into the magnificent city of to-day.

J. W. B.

A New and Attractive History of India.*

GR^{EAT} Britain's most extensive and populous dependency, known as Hindostan, or India, embraces with its feudatory states more than 1,500,000 square miles, with a population, according to the latest census, of 233,000,000 inhabitants. Its extreme length is 1,900 miles and its extreme breadth about the same, with a coast line estimated at 9,185 miles. It is therefore perfectly obvious that the history of so vast and densely populated an empire with a past extending back to the days of Alexander the Great, cannot be told in detail within the compass of two duodecimo volumes. For that the reader is referred to the extensive works of Marshman, Mill, and Thornton, while Grant-Duff, Mountstuart, Elphinstone, Hunter, Kaye, Maine, Malleon, and Sir John Malcolm, have written at length of special and successive periods and campaigns of interest. But the

**India; Past and Present*, by C. H. Forbes-Lindsay. Illustrated. 2 vols., 12 mo., cloth. Philadelphia, Henry T. Coates & Co., 1903.

author of the brief and concise compendium under notice, has accomplished all that could reasonably be looked for in the limited space at his command. While Mr. Forbes-Lindsay makes no claim to original historical research, he has assimilated the abundance of data contained in the authorities above mentioned, relating in attractive style the story of the ancient empire as a consistent whole and at sufficient length to satisfy the average American reader. To the many who lack the desire or time to take up a large and exhaustive work on India, the writer very cordially commends these trustworthy and entertaining volumes in regard to a country which General Grant assured a friend afforded him as much gratification as any of the many lands that he visited during his remarkable tour around the world. The writer has seldom met with a similar work so admirably and copiously illustrated, so carefully printed—being entirely free from typographical errors—and so beautifully bound. Among the fifty photogravure portraits and pictures of temples and towers and tombs, is a representation of a group of native women at work, making pottery, which appears to be done in the identical manner that may be seen at Oaxaca and other localities in Central and Southern Mexico. The value of Mr. Forbes-Lindsay's volumes are enhanced by an excellent glossary and an exhaustive index.

JAS. GRANT WILSON.

The New Era in the Philippines.*

THE author, Arthur Judson Brown, D.D., is the Secretary of the Board of Foreign Missions of the Presbyterian Church in the U. S. A., and his point of view is that of the Evangelical missionary.

We think that the title of the book does not convey to the purchaser a correct idea of its contents. "The Protestant Churches in the Philippines," would be nearer the mark, and under that title would have been included whatever there is of value in the book. We have yet to see a book on the Philippines, in which the author does not feel compelled to begin his story with the discovery of the Islands by Magellan and does not feel compelled to tell "How the United States took the Philippines."

The author spent only two months there, making the short trip from Manila to Iloilo, Panay, thence to Dumaguete, Negros, and return to Manila, yet he must needs write about "A Tour of the Islands," "The Climate and How to Live in It," "The People of the Philippines," "Some Filipino Cities," "The Chinese in the Philippines," etc. His personal knowledge of these subjects must necessarily be very slight and his writings thereon must necessarily be of little value. These chapters take up one-third of the work.

The author then discusses the real subject, the one that should have given to the book the changed title as previously suggested, the advent, history, and future of the Protestant Churches in the Philippines. His remarks about the Roman Catholic Church are not always temperate, and his judgment on the 300 years' influence of that church on the Filipino people will not be accepted by any

**The New Era in the Philippines*, by A. G. Brown, D.D. New York: P. H. Revell Co., 1903.

Roman Catholic nor by the majority of those lay readers of the other denominations who, by one or more years' residence in the islands, have had an opportunity of judging for themselves.

The numerous facts related by the author concerning the stupendous strides made by Protestantism in the Philippines during the past six years, will be very cheerful reading to those who believe with him that the mission of these denominations is the regeneration of the natives.

The book is clearly and forcibly written and there is predominant an uncompromising tone wherever the good of the Filipino and of the Protestant Churches is concerned. The closing chapters are marked by a lofty tone that well becomes the author's profession.

P. E. T.

The Polar Planimeter.*

AN engineer bought a planimeter. With it the makers furnished "Directions for Use." These were, it is presumed, unsatisfying, rather than unsatisfactory; at any rate, they led to an application to the makers for advice as to the best treatise on the instrument, and a reply that the makers did not believe anything of the kind existed—at least in this country.

Whereupon the purchaser wrote a treatise, which the Keuffel & Esser Co. has published.

The main value of the book lies in its indication of the methods of solving various engineering problems by using the planimeter in connection with tables prepared by the author.

Six tables aid to determine areas plotted to various given scales; two, the volumes of prismoids from cross sections 100 feet apart; one, volumes of grading and dredging from horizontal contours of one foot vertical intervals; one, contents, in gallons, of reservoirs from like horizontal contours as in grading; one, the number of bricks in sewers, walls, etc., between parallel sections one foot apart; and a twelfth, the volume of sections an inch thick, of various metals, and the multipliers by which to convert these volumes into weights.

In addition, attention is directed to the possibilities of the planimeter in the solution of problems involving averages or mean values; such as determining the mean height of an indicator diagram, the average discharge of a stream, and the center of gravity of a plane area.

The planimeter, properly set and moved, records the area bounded by the line traced. How to set it; in what unit the area is recorded for various scales to which the area is plotted; what other units under certain conditions, may be used to have the record in cubic inches or yards or in gallons; how to convert the record into lineal units, as in the case of averages; all this is made evident in the book prepared by J. Y. Wheatley, C. E. K.

*The Planimeter and its Use in Engineering Calculations. By J. Y. Wheatley, C. E. N.Y. Keuffel & Esser Co., 1903.

Japanese Physical Training.*

IN this interesting little book of 155 pages are first described the principles of the Japanese "Jiu-Jitsu," or "muscle breaking exercises." If these primary principles are carefully studied and followed, the results must certainly be beneficial to health although the student may not desire to apply them to the various tricks of attack and defense described in the latter part of the book.

The author considers the Japanese as the healthiest, happiest and strongest people in the world, and attributes this fortunate condition largely, to jiu-jitsu.

The first eight chapters treat of the development of a healthy physical state, and deal with the questions of diet, the value of pure air, deep breathing, frequent bathing, exercises for strengthening the heart, lungs, legs, etc., the value of an even temper, water as a remedy, and cures for leanness and obesity. The remainder of the book is devoted to the explanation of the special tricks employed by the followers of jiu-jitsu which if properly applied must be most effective in personal encounters.

In Japan, women as well as men are trained in the various stages, and the author holds that both sexes give us the finest examples of physical development to be found, and among them such troubles as dyspepsia, insomnia, and heart trouble are almost unknown.

The book is entertainingly and clearly written, and the numerous photographs make self-instruction a simple matter. X.

How George Rogers Clark Won the Northwest.†

THE title of this volume is misleading, as it comprises a number of chapters or lectures on various subjects connected with the winning and settlement of the Northwest, only one of them being devoted specially to the exploits of Clark.

The chapters on Clark, the Black Hawk War, and the Story of Mackinac are of special interest.

Clark's success was due to a rare combination of courage, tactfulness, honesty and common sense, and his career was one to which all Americans may turn with pride.

On the other hand the story of the Black Hawk War is one to make us blush with shame, for it was, on our part, a sad record of savage cupidity, bad faith, stupidity and cruelty, both in its inception and conduct, such as has been seldom equalled.

"The Story of Mackinac" is an interesting account of the occupation of Mackinac Island, the transfer of the name and post to the mainland first south and then north of the Straits, and its final retransfer to the original island with the resulting historical confusion.

"A Day on Braddock's Road" is an entertaining account of the author's visit to the site of Fort Necessity and Great Meadows.

Another chapter is devoted to the division of the Northwest, and is a vivid picture of the efforts and intriguing on the part of the various states to get desirable strips of territory at the expense of their neighbors. X.

**Japanese Physical Training*, by Irving Hancock. New York, G. P. Putnam's Sons, 1903.

†*How George Rogers Clark Won the Northwest*, by Reuben Gold Thwaites. A. C. McClurg & Co., Chicago, 1903.

The remaining chapters on La Pointe, Lead Mining, and the Draper Manuscripts are of less general interest, but the entire book deals with certain phases of history of which there is little general knowledge, and presents it in a form which is acceptable to the average reader.

Korea and the Topknots.

THESE two books* are widely different in their treatment of Korea. One is the work of a newspaper correspondent who tells the blunt truth about manners and customs, trade and politics; the other is the work of Mrs. Underwood, a Presbyterian missionary, and is published by the American Tract Society.

Mr. Angus Hamilton's "Korea" vividly portrays the present state of affairs as well as gives us a glance at the Hermit Kingdom of the past.

The author was for two years the special correspondent in Korea of the *Pall Mall Gazette*, and he writes in an easy and graceful style, yet in a style that soon convinces the reader of a thorough command and understanding of the subject whereof he treats.

He traveled overland from Fusan to Seoul and from Seoul to Wonsan. In his description of the latter trip he gives an excellent idea of the Diamond Mountains on the East coast where are located the thirty-four Buddhist monasteries of the Keum-Kang-San, and he disproves by his own observations the charges of gross profligacy and irreverence brought against the Buddhist priests by the agent of an American missionary society. The author is not fond of missionaries, but more especially does he point his darts at the American evangelist.

As a part of his business he examined all the inland and coast centers of mining, industry, and trade, and his remarks thereon and of the foreign interests of England, America, Japan, France, Germany, and Belgium should be valuable to all those concerned.

He throws in bold relief the methods of Russia and Japan in Korea. According to him both these nations are equally unscrupulous and selfish in their treatment of this weak and buffer state. He gives for instance the details of the Russian timber-cutting concession on the Yalu on pretence of which Yongampo and a long strip of Korean soil was occupied by the Russians. On the other hand, he arraigns the Japanese equally severely for their action in Korea during the famine of 1901: (p. 253) "The action of Japan, therefore, in insisting upon the suspension of the prohibition [by Korea against exporting rice] in order that the interests of some half dozen Japanese rice merchants might not suffer, deserves the utmost condemnation. The primary responsibility for this great loss of life rests entirely with the Japanese government. In terrorizing the Government of Korea into an act, the consequences of which brought death to one million people, the Japanese Government committed themselves to a policy which traversed alike the dictates of reason and common sense, and outraged every principle of humanity."

* *Korea*. By Angus Hamilton, N. Y. Scribner's Sons, 1904.
Among the Topknots. By L. H. Underwood, M.D. N. Y., Am. Tract Society, 1903.

The author published his volume in December, 1903, two months before the outbreak of war between Japan and Russia and his knowledge of the situation and command of the facts are well shown by the course of events since February.

The nine illustrations from photographs are interesting and the map of Korea prepared by the author himself is, with the exception of our own recent military map, the best we have seen.

In "Fifteen Years Among the Top-Knots," Mrs. Underwood gives her experience of missionary work in Korea. Sent out in 1884 by the Presbyterian Board as a medical missionary, she married one of her fellow-workers and the description of their unique two months' wedding trip, which was really a mission pilgrimage of a thousand miles through northern Korea, gives one a good idea of life among the peasantry and of the filthy inns and lovely mountain scenery. As she was the first white woman to travel through the interior she was the object of unbridled curiosity and at times she and her husband had some narrow escapes from the enmity of the rougher elements of the populace.

Mrs. Underwood was on terms of friendship with the late Queen and went often to the palace. She greatly admired this unfortunate victim and she gives a circumstantial account of her murder and the subsequent unsettled condition of the Kingdom.

The book does not claim to be a history of Korea nor a work of reference. It is merely a narration of events that came under the personal observation of the writer and it deals very slightly with the stirring political questions of the day.

P. E. T.

Rocky Mountain Exploration.

THE latest edition to Appleton's series on the expansion of the Republic has for its title "Rocky Mountain Exploration."*

It is a condensed account of the conquest by adventurers and explorers of the western half of the North American Continent, and of its release from the grasp of the fabulous and unknown. Commencing with the Spanish search for the famous cities of Cibola, we are given a rapid survey, hardly more than a mention, of the names, of a score or more of the explorers of the early days of the continent. The Eighteenth Century dream of a water passage from the Atlantic to the Pacific inspired the work of the discoverers down to the time of Lewis and Clark. A third of the text is devoted to a sketch of the work of these two indefatigable explorers.

For twenty years had Thomas Jefferson at various times given his aid and influence to endeavor to penetrate and open up the continent west of the Mississippi. His was the plan, frustrated by the Empress of Russia, Catherine II, which Ledyard endeavored to carry out, starting eastward from Paris and, via St. Petersburg and Nootka Sound, attempting to reach the western shores of America. At the time of the inception of the Lewis and Clark journey, Lewis was President Jefferson's private secretary, and received from him many ideas as to the work to be accomplished by his quest. The

* *Rocky Mountain Exploration.* By R. G. Thwaites, N. Y. D. Appleton & Co., 1904.

support of Congress for this exploit had been sought and obtained before the purchase of the Louisiana territory. Jefferson at that time seeking only to obtain from France the City of New Orleans. Before the pair started from St. Louis, however, the First Consul of France had doubled the area of the United States by the sale to them of the Louisiana territory, and this acquisition had received the approval of Congress. The sketch of the travels of Lewis and Clark given by our author but sharpens the desire for the perusal of a complete record of their work. The tale of the exploration carried on during the Nineteenth Century closes with a summary of the surveys made under the direction of General (then Lieutenant and Captain) John C. Fremont.
F. W. C.

A Chronicle of the Regulars.

THE preface to this little book* clearly sets forth the motive which led to its publication. The author says "The Volunteer has been the recipient of so much that has been written in relation to his virtues, sufferings and heroism, that I deem it only fair to ask him to share with his brother-at-arms, the Regular, a portion of the sweet smiles that have been bestowed on him by a fair minded and liberty loving people."

It is a chronicle of the service of Troop "A" Fifth U. S. Cavalry in Puerto Rico in 1898-99, written by a young New Yorker who, with others smitten with the Spanish-American War fever, wisely concluded to do his soldiering in the company of those who understood the business. Although his service as a trooper was limited to a twelve-month, yet he managed to crowd into that brief period almost every variety of scene and duty which, ordinarily, falls only to the lot of a veteran. The story is told without boasting by a close observer, whose criticism of men and things as he found them are, in the main, untinged by prejudice. The literary style would be creditable to a more experienced writer and he has succeeded in giving us a sharp "snap-shot" photograph of the life of an American cavalryman during a short war and in paying a deserved if belated tribute to the worth of that faithful servant of Uncle Sam. The volume should be supplied to every post library for the promotion of *esprit de corps* in the Army.
T. F. R.

* *Roughing it with the Regulars.* By W. H. Oliver, Jr. N. Y., W. B. E. Parr, 1901.

Our Exchanges.

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A COSSACK.



Journal
of the
Military
Service
Institution
1878
1904

Governor's
Island
N. Y. H.

THE JOURNAL

JULY—AUGUST, 1904



SOME of the papers approved for publication in the JOURNAL for JULY, 1904.

- I. "THE WAR IN THE FAR EAST" will furnish material for study and comment with the aid of a Field Map specially prepared for this Journal.
- II. "SMALLER BATTERIES FOR FIELD ARTILLERY"—a proposed organization for batteries of the United States Army—by Captain S. M. Foote, Artillery Corps.
- III. "A PRACTICAL COURSE OF INSTRUCTION IN SECURITY AND INFORMATION"—by Lieut. G. W. Winterburn, 9th Cavalry.
- IV. "A SUGGESTED NATIONAL ORGANIZATION FOR THE MILITIA"—by Mr. C. S. Clark, Military Editor, N. Y. Daily News.
- V. "MILITARY INSTRUCTION FOR SCHOOLBOYS"—by Lieut. J. F. Griffin, 14th Inf., N. G. N. Y.
- VI. "ARMY EPISODES AND ANECDOTES OF LIFE AT VANCOUVER BARRACKS"—vividly portraying the romance and reality of the Frontier—an unpublished volume, the MS. of which has been contributed by the author, Brigadier General Thomas M. Anderson, U. S. A., to the Journal, and from which selections will appear from time to time in the department of "Historical Miscellany."

THE PUBLICATION COMMITTEE invites contributions of original papers, translations and comments upon current topics. Attention is called to "Gold Medal," "Seaman," "Short Paper" and "Santiago" prizes mentioned elsewhere

